THE UNIVERSITY OF ALBERTA

MANAGERIAL PHILOSOPHY AND PUPIL CONTROL IDEOLOGY IN ELEMENTARY SCHOOLS

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled MANAGERIAL PHILOSOPHY AND PUPIL CONTROL IDEOLOGY IN ELEMENTARY SCHOOLS submitted by EUGENE J. MILLER in partial fulfilment of the requirements for the degree of Master of Education.

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To Leslie Anne - she understood and cared.

ABSTRACT

The problem under investigation in this study was the relationship between certain characteristics of principals and the pupil control orientations of their staffs. Principals' pupil control ideologies and their assumptions about human nature were conceptualized as forming a part of principals' managerial philosophies. The PCI Form was utilized to measure the educators' ideologies regarding pupil control. A measure of principals' orientations toward Theory X and Theory Y was obtained from the results of their responses to the Theory X-Y Scale. Data from 319 teachers and twenty-nine principals were collected and analyzed. Descriptive and inferential statistics were employed to describe the respondents and to analyze the data. Statistical significance was reported when the obtained probability level was less than .05.

The first section of the data analysis focussed on the testing of the six research hypotheses. Principals were found to be significantly more humanistic than their staffs. The Theory X or Theory Y assumptions held by the principals were found to be good indicators of pupil control ideology. Principals who held Theory X orientations about human nature were custodial as were their staffs; principals who held Theory Y orientations were humanistic as were their staffs. The pupil control ideologies of the principals did not relate significantly to the pupil control ideologies of their staffs. School size was positively correlated with custodialism.

In the second section of the data analysis, the influence of certain personal and organizational variables on PCI were examined.

None of the personal variables that were examined contributed significantly to the variance in staff PCI. A significant correlation was found between staff pupil control ideology and grade level, staffing assignment and socioeconomic status of the students.

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Chapter 1

THE PROBLEM

INTRODUCTION

The positions of elementary school principal and teacher are the foci of this study; that these two positions are important in the educational system does not have to be stressed here. As Sergiovanni and Elliott (1975:3) have noted:

> Elementary school principals are in a position to exert a powerful influence on the state of schooling and school administration... Moreover, since elementary school children are at a relatively formative age, teachers and principals are in a position to assume an important role in determining the kinds of human beings these young people will be in later school years and in adult life.

A number of other writers in educational administration have agreed that the principal of the elementary school is in a position where he can influence both teachers and students (Waller, 1932; Brown, 1967; Gross and Herriott, 1965).

This study was concerned with two orientations held by principals - their orientations toward the control of their staffs and their students. Principals' basic assumptions about teachers and students will affect their behaviour toward them. Indeed, their behaviour toward their staffs and pupils will attest to the managerial philosophy of the principals. Behind most decisions lies the basic belief system that principals hold for staffs and students.

Thus, this study investigated the influence of the principal's managerial philosophy on his staff's classroom control ideology. Is there a relationship between principals' expectations, as indicated by their managerial philosophy regarding the control of staff and students, and their staffs' orientation toward pupil control? In addition to the above investigations, this study undertook to replicate some previous research in regard to pupil control ideology.

THE PROBLEM AND SUB-PROBLEMS

The following problem and sub-problems were delineated from a review of the relevant literature and findings of previous research regarding pupil control.

Problem

Is the orientation of a school staff toward student control systematically associated with the principal's managerial philosophy?

Sub-Problems

1. Is there a systematic association between an elementary school principal's pupil control ideology and the pupil control ideology of the principal's instructional staff?

2. Is there a systematic association between an elementary school principal's Theory X-Y orientation and the pupil control ideology of the principal's instructional staff?

DEFINITION OF TERMS

The following terms are used extensively in this study and have a unique meaning.

1. Managerial philosophy: This term refers to the principal's assumptions about the control of his staff and students. These assumptions may range from a pessimistic view that man is basically lazy, unwilling to work and requires direct control (Theory X), to a more optimistic view that man can receive and will seek satisfaction from his work and is capable of self-control (Theory Y). The principal's managerial philosophy also includes his pupil control ideology.

2. Pupil control ideology: This term refers to the belief system that educators hold regarding the control of students. In this study it is often referred to by its acronym - PCI.

3. Custodial orientation to PCI (Custodial PCI): This orientation is exemplified by educators who believe students are basically irresponsible and undisciplined persons and must be controlled through punitive sanctions.

4. Humanistic orientation to PCI (Humanistic PCI): This orientation is exemplified by educators who believe students are responsible persons who can exercise self-discipline.

ASSUMPTIONS, LIMITATIONS AND DELIMITATIONS

The following assumptions, limitations and delimitations must be borne in mind throughout this study.

Assumptions

1. It was assumed that the instruments which were used, measured that which they purported to measure.

2. The scales in the two major instruments (PCI Form and Theory X-Y Scale) can be considered to be interval-level scales for the sake of analysis.

3. The principals and teachers were not only representative of their school jurisdiction but also representative of elementary schools in general. To the extent that this assumption is incorrect, it is an inherent weakness of the study.

Limitations

1. The instruments used in this study were administered as part of a large battery of instruments. The possibility that the respondents may have tired must be considered.

2. The orientations (Theory X, Theory Y, custodial, humanistic) can only be considered to be relative. The means of the responses were used to dichotomize custodial and humanistic educators, Theory X and Theory Y principals and large and small schools.

Delimitations

1. In order for a school to be part of the study, at least 60% of the teachers had to respond to a minimum of 60% of the items in the PCI Form. Similarly, the principals had to respond to at least 60% of the items in the PCI Form and Theory X-Y Scale. If these criteria were not met, the school was excluded from the study.

2. Only elementary (kindergarten to grade 7) teachers and principals were included in the study.

ORGANIZATION OF THE THESIS

In this chapter, the problem under investigation was introduced. After listing the more general problem, two specific sub-problems were extracted to further narrow the focus. Definitions of certain terms, limitations, assumptions and delimitations were also outlined.

In Chapter 2, a summary of the relevant literature concerning pupil control is presented. In the same chapter is found the theoretical framework which forms the basis of this study. The six research hypotheses are also presented in Chapter 2. Chapter 3 contains descriptions of the instruments, method of data collection and the educators in the study. The analysis of the data related to the hypotheses is undertaken in Chapter 4, and in Chapter 5, further analysis of the data is presented. The results of tests to check previous findings are also reported. Chapter 6 contains the summary, implications and suggestions for further research and analysis.

Chapter 2

RELATED LITERATURE AND THEORETICAL FRAMEWORK

Etzioni (1964:1) has indicated the importance of organizations in modern society:

> Our society is an organizational society. We are born in organizations, educated by organizations, most of us spend much of our lives working for organizations. Most of us will die in an organization, and when the time comes for burial, the largest organization of all - the state - must grant official permission.

Talcott Parsons (1960:17) has defined organizations as social units (or human groupings) which are deliberately constructed to seek specific goals. Etzioni has found that organizations have certain characteristics that facilitate the attainment of these specific goals:

> 1. divisions of labor, power and communication responsibilities which are intentionally constructed.
> 2. the presence of one or more power centers which direct and also review the organization's performance.
> 3. substitution of personnel so that persons can be removed, transferred or promoted (1964:3).

Schools are usually included in the type of organization known as the service organization; "people changing" organizations that work with humans as raw materials.

R.O. Carlson (1964:262-76) divided service organizations into four types using the interaction of two criteria:

1. control by the organization over its clients, and

2. control by the client over his own participation in the organization. Public schools fall into the type of organizations where neither control of selection by the organization nor choice of participation by the client is allowed. This lack of choice by both the organization and the client is especially evident in the public elementary school. Sometimes educational services must be provided for clients who are less than willing; in fact, some public school clients are very reluctant. It should not be surprising that the control of these reluctant clients has become an important feature of the organizational life in public schools. Willower and Jones (1963:107) have described pupil (client) control as an "integrative theme" of public schools.

PUPIL CONTROL IDEOLOGY

Pupil control is a form of social control. Social control is the means by which social order is established and then maintained. The word 'control' suggests that there are some required and certain unacceptable behaviours. In some organizations, these requirements and restraints may be institutionalized in the form of rules and regulations. Various sanctions ensure that the behaviour of the member is at an acceptable level. These sanctions may take the form of punishments or rewards (Willower, 1965:41-2).

In their study of the control ideology of mental hospital personnel, Gilbert and Levinson (1957) employed a unique typology. These researchers adopted a control ideology continuum ranging from 'custodial' at one end to 'humanistic' at the other. These extremes are ideals and may not be found in actual practice exactly as

conceptualized. Willower, Eidell and Hoy (1973:5-6) adapted this conceptualization to describe the ideology of educators toward the control of students. These researchers also developed prototypical educators of each of the extreme control ideologies.

> The rigidly traditional school serves as a model for the custodial orientation. This kind of organization provides a highly controlled setting concerned primarily with the maintenance of order. Students are stereotyped in terms of their appearance, behaviour, and parents' social status. They are perceived as irresponsible and undisciplined persons who must be controlled through punitive sanctions. Teachers do not attempt to understand student behaviour, but, instead, view it in moralistic terms. Misbehaviour is taken as a personal affront. Relationships with students are maintained on as impersonal a basis as possible. Pessimism and watchful mistrust imbue the custodial viewpoint. Teachers holding a custodial orientation conceive of the school as an autocratic organization with rigidly maintained distinctions between the status of teachers and that of pupils. Both power and communications flow downward, and students are expected to accept the decisions of teachers without question. Teachers and students alike feel responsible for their actions only to the extent that orders are carried out to the letter.
>
> The model of the humanistic orientation is the school conceived of as an educational community in which members learn through interaction and experience. Students' learning and behaviour is viewed in psychological and sociological terms rather than moralistic terms. Learning is looked upon as an engagement in worthwhile activity rather than the passive absorption of facts. The withdrawn student is seen as a problem equal to that of the overactive, troublesome one. The humanistic teacher is optimistic that, through close personal relationships with pupils and the positive aspects of friendship and respect, students will be self-disciplining rather than disciplined. A humanistic orientation leads teachers to desire a democratic classroom climate with its attendant flexibility in status and rules, open channels of two-way communication, and increased student

> self-determination. Teachers and pupils alike are willing to act upon their own volition and to accept responsibility for their actions. (Willower et al., 1973:5-6)

Budzik (1972:22-3) has further elaborated on the differences between the extreme pupil control orientations. Teachers in custodial schools are more prone to use punitive sanctions to control behaviour: ridicule, coercion and the withdrawal of rewards. As mentioned earlier, organizations may choose to use rewards or punishments to elicit acceptable behaviour. Custodial schools are more concerned with punitive devices, and hence there is greater social distance between teachers and students. Humanistic schools emphasize non-punitive sanctions to control behaviour. More stress is placed on inner control or self-discipline. There is greater social interaction between the teachers and the students in humanistic schools.

PUPIL CONTROL IDEOLOGY FORM

Willower, Eidell and Hoy (1973:10-4) devised an instrument to measure pupil control orientations of educators. The PCI Form was developed to assess an educator's position on the custodial-humanistic continuum. After many modifications, the instrument was reduced to twenty Likert-type items; subjects responded to the instrument by indicating their agreement with the items. For each statement related to pupil control, the respondents marked their agreement on a five-point scale: strongly agree, agree, undecided, disagree and strongly disagree. Some items in the PCI Form were: "It is more important for pupils to learn to obey rules than that they make their own decisions" and "If pupils are allowed to use the lavatory without

getting permission, this privilege will be abused". After administering the PCI Form to many educators, Willower, Eidell and Hoy attempted to determine whether the instrument was reliable and yielded valid results. The PCI Form was found to be satisfactory on tests of reliability and validity.

EMPIRICAL RESEARCH USING PCI FORM

Since the initial conceptualization of pupil control ideology, many empirical studies have been conducted. Based on the assumption that pupil control was a dominant feature of public schools, researchers have attempted to relate various characteristics of educators and of the organization to pupil control ideology. Some of these studies are reviewed in this section.

Level of Education and PCI

Willower, Eidell and Hoy (1973:6-7) hypothesized that the educators who were directly responsible for the students would be more custodial than those with less direct responsibility. They predicted that teachers would be more custodial than principals and guidance counsellors. Willower et al. also predicted that, because of less perceived threat from their students, elementary teachers would be less custodial than secondary teachers. Both of the above hypotheses were confirmed at the .001 level of significance:

1. Teachers were more custodial than principals who were more custodial than guidance counsellors.

2. Secondary teachers were more custodial than elementary teachers.

Further analysis confirmed the hypothesis that secondary principals were more custodial than elementary principals. In addition, elementary principals were more humanistic than elementary teachers and secondary principals were more humanistic than secondary teachers.

MacMillan (1973), using a sample of Nova Scotian educators arrived at similar findings. These Canadian elementary teachers were significantly more custodial than the principals of the schools. Williams (1972) found confirmation for similar hypotheses. His research also indicated that PCI was related to school level. Secondary educators were more custodial than their elementary colleagues. Warrell (1969) used a slightly different grade level division in his research with PCI. When he compared the PCI of senior high school teachers with the PCI of junior high school teachers, he found that the senior high school teachers were significantly more custodial. In further analysis, Warrell discovered that junior high teachers who moved to senior high schools did not become significantly more custodial than the junior high teachers who were currently teaching in junior high schools. Longo (1972) explored the PCI of cooperating teachers and education instructors at Queen's Teachers College. He found that education instructors were more humanistic than the cooperating teachers. He also discovered that the college instructors were most humanistic, followed by early childhood teachers, elementary teachers and secondary teachers. Kozakewich (1973) found that the level of school was not a good predictor of teacher PCI. In his sample of Albertan schools, he found that senior high school teachers were significantly more humanistic than junior high teachers who were

more custodial than elementary school teachers. This study also confirmed the hypothesis that teachers were more custodial than principals.

Most of the research cited above lends credence to the hypothesis that Willower, Eidell and Hoy originally posited: that those educators who were more directly responsible for and in closer contact with the clients in the school organization would be more custodial. In addition, Willower, Eidell and Hoy hypothesized that those educators who felt less threatened by their students, because of their age and size would be more humanistic. Most empirical studies showed that principals were more humanistic than elementary teachers who were more humanistic than secondary teachers.

Teacher Characteristics and PCI

A number of studies have been undertaken to explore the relationship between various characteristics of educators and their pupil control orientations.

Experience. Some researchers have hypothesized a positive correlation between the number of years of teaching experience and PCI. Kozakewich (1973) did not find a significant correlation between teaching experience and PCI. Willower, Eidell and Hoy (1973) found confirming evidence for the hypothesis that more experienced teachers were more custodial than less experienced teachers. Hoy (1968) (1969) did find that elementary and secondary teachers became significantly more custodial after their first year of teaching. The PCI of teachers who did not teach during their first year after graduation did not change. In the latter study, Hoy found that the second year

of teaching had a negligible impact on the PCI of most teachers. More studies will be cited later to illustrate the influence of organizational socialization.

Dogmatism. In their original study, Willower, Eidell and Hoy (1973) focused on a personality factor and PCI. They made use of Rokeach's (1960) conceptualization of open and closed mindedness. An open-minded individual was described as one who was able to receive information without distortion, evaluate and analyze it objectively. Conversely, a closed minded individual was described as one who distorted information by introducing irrelevant factors to the situation. Rokeach used the term dogmatism to describe the degree of open and closed mindedness. Willower, Eidell and Hoy predicted that closed minded educators would be more custodial than open minded educators. The following operational hypotheses were confirmed at the .001 level of significance:

1. Closed minded teachers were more custodial than open minded teachers (confirmed for the overall sample of teachers, and for elementary and secondary teachers separately).

2. Closed minded principals were more custodial than open minded principals (also confirmed for the overall sample of principals and for elementary and secondary principals separately).

Using a sample of high school principals, Heineman (1971) reported similar findings. Longo (1972) also found a significant relationship between the degrees of custodialism and closed mindedness. Further support of a significant correlation between dogmatism and custodialism was reported by Williams (1972).

Traditionalism. There have been empirical studies conducted which explored the relationship between other personal characteristics of educators and PCI. Helsel (1971b) used the traditional-emergent continuum developed by Spindler (1955) and subsequently by Getzels (1957). Traditional values were conceptualized as the Puritan morality, individualism, work-success ethic and future-time orientation. Conversely, emergent values included conformity, sociability, moral relativism and present-time orientation. Helsel's major hypothesis that traditionalism was positively correlated with custodialism was confirmed at the .01 level of significance. Gipp (1974) measured teachers' perceptions of their community's education viewpoints on a traditional-modern continuum. This researcher predicted that teachers who saw their community as being traditional in outlook toward education would be more custodial in pupil control orientation. This hypothesis was confirmed at the .01 level of significance. The more traditional the teacher's perception of community views on education, the more custodial was the PCI held by the teacher.

Status obeisance. Helsel (1971a) predicted that those teachers who placed a higher value on status obeisance would be more custodial in their pupil control. Status obeisance was "defined as the value placed on authority for its own sake and the deference shown those positions higher than one's own" (Helsel, 1971a:39). Helsel found evidence that confirmed his hypothesis. Similarly, MacMillan (1973) studied the relationship between status obeisance and PCI, using subjects from Nova Scotian elementary schools. This researcher found

that teachers who were serving in high obeisance schools were significantly more custodial than teachers in low obeisance schools. Even though the high obeisance principals were not more custodial than the low obeisance principals, high obeisance schools were significantly more custodial than low obeisance schools.

Local-cosmopolitan orientation. Williams (1972) found that there was a positive relationship (correlation) between a local orientation and custodialism.

Level of self-actualization. Jury (1973) examined the relationship between teachers' PCI and their levels of self-actualization. The teachers' level of self-actualization was measured by using the Personal Inventory as developed by Shostrom. Jury hypothesized that teachers' level of self-actualization would be positively correlated with their degree of humanistic pupil control orientation. The hypothesis was tested using a Pearson product-moment correlation and the hypothesis was confirmed at the .001 level of significance.

The empirical research that has been reviewed in this section has outlined the relationship between the following personal characteristics of educators and PCI:

1. Experience - some research has indicated a positive relationship between length of teaching experience and custodialism.

2. Dogmatism - most findings confirmed a positive correlation between closed mindedness and a custodial PCI.

3. Traditionalism - more traditional educators were also more custodial in their PCI.

4. Status obeisance - educators who conceded greater deference to higher positions were more custodial.

5. Local-cosmopolitan orientation - educators who were more local in orientation were also more custodial.

6. Level of self-actualization - those teachers who saw themselves as being more self-actualized were humanistic in PCI.

Organizational Climate and PCI

Some researchers have explored the relationship between selected organizational variables and PCI. These studies have examined variables that are concerned with the organizational structure of schools. Appleberry and Hoy (1969) investigated the relationship between the organizational climate and PCI. Schools were ranked on an open-closed continuum using Halpin and Croft's Organizational Climate Description Questionnaire (1963). They reported that elementary schools with relatively open climates were significantly more humanistic than their relatively closed counterparts. Waldman (1971) found similar results when he examined the organizational climates of secondary schools.

The influence of bureaucratic style on pupil control ideology was studied by Jones (1969). He found that teachers in secondary schools who priorized the dimension of authority and who were characterized by a punishment centred bureaucratic style were more custodial than those teachers who were low on the authority dimension and preferred representative style schools.

Zelel (1971) examined the relationship between teachers' sense of power and PCI. This researcher reported that a custodial PCI was

associated with a low sense of power and conversely, a humanistic teacher saw himself as possessing a greater sense of power.

Using the Pupil Control Ideology Form, Hoy and Appleberry (1970) trichotomized 45 schools into fifteen 'humanistic', fifteen 'custodial' and fifteen moderate schools. They found further confirmation for their previous research that humanistic schools were more open in overall climate than custodial schools (Appleberry and Hoy, 1969). In the 'humanistic' schools, the principals were less formal and impersonal and attempted to motivate the teachers more by personal example than by close supervision. As well, the teachers in the 'humanistic' schools worked together better and felt that their social needs were being met; they were enjoying a sense of accomplishment in their work.

Researchers have reported positive correlations between organizational climate and PCI. Open climates and climates that allowed for a greater sense of power by the teachers were associated with more humanistic pupil control orientations.

Socialization of Teachers

Discipline in public schools has been a topic of great interest for educators. It has been frequently observed that teachers use many varied approaches in the control of their students. Some researchers have attempted to define variables that cause some teachers to be more concerned with strict control over their students. Other teachers give higher priority to helping students become self-disciplined. Hoy (1967) examined the influence of student teaching on the participants. He reported that there was a significant difference in the pupil control

orientations before and after student teaching. Both the elementary and secondary school student teachers became significantly more custodial. In another study, Hoy (1968) studied the influence of the first year of teaching on PCI. He reported that both elementary and secondary teachers were significantly more custodial both after completing their student teaching and again after their first year of teaching. Those teachers who graduated with the above group but did not teach during the first year after graduation, remained unchanged on the PCI Form when compared to their scores at the end of student teaching. Hoy (1969) further reported that although the above results indicated increased custodialism after student teaching and again after the first year of teaching, the second year of teaching had little impact on the PCI.

Roberts and Blankenship (1970) studied the influence of the perceived pupil control orientations of cooperating teachers by student teachers. Those students who felt that they were much more humanistic in pupil control than their cooperating teachers, felt greater pressure to conform to their cooperating teachers' custodial orientation, than those students who perceived less difference in their PCI from their cooperating teachers' pupil control orientations. Again, these researchers found that most student teachers became more custodial during student teaching. Those students who did not become more custodial were already significantly more custodial than their colleagues.

Similar findings to Hoy, Roberts and Blankenship were reported by Hamil (1971). Even though the student teachers' pre-tests were

significantly more humanistic than their cooperating teachers, their post-tests were not significantly different.

Studies have reported that as teachers were incorporated into the organizational structure of the school system, their pupil control ideologies became more custodial. This was especially evident as prospective teachers proceeded from student teaching to completion of their first year of teaching. As the novice teachers were absorbed into the school system, they became more concerned with student control.

THEORETICAL FRAMEWORK

A basic function of an organization is the raison d'etre for organizations - to seek specific goals. To attain these specific goals, organizations must attempt to coordinate the activities of its members. Deliberate efforts must be made by the organization to ensure that all members conform to minimum standards of behaviour. Organizations use rewards and sanctions to support compliance with their norms, regulations and orders (Etzioni, 1964:59).

In elementary schools, principals are expected to enforce the minimum standards of behaviour for teachers and students. Even though the principal may not be accepted as the final authority in all matters, the office of the principal has traditionally been seen as a position of authority in the school's hierarchy. Gross and Herriott (1964:1) have noted, "The conception of the elementary school principal's role as a leader of his staff permeates the educational literature..." How do principals cause their staffs and students to conform to the required minimum standards of behaviour? In the

previous section of this chapter, a conceptualization of educators' orientations toward pupil control was presented. Principals' pupil control ideologies indicate how they believe students should be controlled; these ideologies range from custodial to humanistic. Principals' basic assumptions about human nature as incorporated in Theory X and Theory Y represent their belief system about how their staffs should be controlled.

Theory X-Y Orientation

Every principal brings a set of beliefs about his position to the principalship. What assumptions do principals make about their staffs? McGregor has suggested that "behind every managerial decision or action are assumptions about human nature and human behaviour" (1960:33). McGregor has described two ideal-type management philosophies as Theory X and Theory Y. He maintained that every manager would likely tend to agree more with one set of assumptions than the other.

The three basic assumptions held by those who typify a Theory X orientation are:

> 1. The average human being has an inherent dislike of work and will avoid it if he can.
> 2. Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
> 3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all. (McGregor, 1960:33-4)

A principal who subscribes to these assumptions about human nature is very much concerned with the control of his staff. He directs his staff's efforts, controls their actions and modifies their behaviour

to fit the needs of the organization. His supervisory and leadership style are highly directive because his belief system about human nature dictates that most people must be coerced to get them to work. The control of the school staff is completely in the hands of the leader who in this instance is the principal. The control of the staff is external and does not take into account that people may wish to be self-determining. McGregor has pointed out that Theory X assumptions fail to account for the professional worker.

Theory Y adherents base their organizational behaviour toward their subordinates on the following:

> 1. The expenditure of physical and mental effort in work is as natural as play or rest. The average human being does not inherently dislike work.
> 2. Man will exercise self-direction and self-control in the sevice of objectives to which he is committed.
> 3. Commitment to objectives is a function of the rewards associated with their achievement.
> 4. The average human learns, under proper conditions, not only to accept but to seek responsibility.
> 5. The capacity to exercise a relatively high degree of imagination, ingenuity and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
> 6. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized. (McGregor, 1960:47-8)

Those who adhere to Theory Y assumptions see their jobs as supplying conditions so that the efforts of his subordinates are facilitated and supported. The supervisory and leadership style of the Theory Y principal lend support to the facilitation of the efforts of his staff. Theory Y proponents rely heavily on self-control and self-direction of the individual.

As previously mentioned, Theory X and Y refer to pure types which may not be found in the empirical world. Principals make both Theory X and Theory Y assumptions but tend toward one set of assumptions. McGregor was interested in the basic beliefs toward human nature held by executives. He maintained that the basic tenets of Theory X were the only assumptions that could explain the early principles of organizations. Some executives still believe in and use these assumptions as a basis for their actions.

The Principal and his Staff

Sergiovanni and Starratt (1968:75) report that teachers respond to their principals in such a way that they reinforce the principals' supervisory styles. Rosenthal and Jacobson (1968) have studied this self-fulfilling prophecy and found that teachers' expectations regarding students are often realized.

Principals who agree with Theory X assumptions about human nature believe their staffs require specific direction to enforce the minimum acceptable standards of behaviour. The staffs of these principals respond in such a way that they reinforce the principals' beliefs about their staffs. Since the staffs are considered to be irresponsible and incapable of self-control, they treat their students in a similar manner. These staffs believe their students must be closely controlled; students are not capable of self-direction and self-discipline. Principals who believe that people must be coerced and threatened to get them to work (Theory X), also believe that students must be closely controlled to get them to work (custodial pupil control ideology). The students of principals with custodial

pupil control ideologies respond in such a manner that the principals' expectations are realized. Students cannot be trusted to behave responsibly or exercise self-discipline. Teachers, who teach in schools where the principals have Theory X and custodial pupil control orientations, also will have custodial pupil control ideologies.

Principals who agree with Theory Y assumptions about human nature believe their staffs can exercise self-direction and self-control and accept responsibility. These beliefs of the principals are reinforced by their staffs. The staffs treat their students in the same manner; students are capable of self-direction and self-discipline. Principals who believe that people do not inherently dislike work and are not irresponsible (Theory Y assumptions), assume that students can display self-control and be self-disciplining (humanistic PCI). Students of these principals reflect their principals' expectations and display increased self-determination. Teachers, who teach in schools where the principals have Theory Y orientations and humanistic pupil control ideologies, will have humanistic pupil control ideologies.

RESEARCH HYPOTHESES

From the preceding literature review and theoretical framework, six research hypotheses were posited. Hypothesis One was intended to test previous findings as reported by Willower, Eidell and Hoy (1973), MacMillan (1973) and Kozakewich (1973). These researchers found that teachers were significantly more custodial than principals.

H1: Principals of elementary schools are more humanistic than the teachers of elementary schools.

Hypothesis Two was suggested by the studies that had indicated teachers were more custodial than principals. In this study, examination of the similarities between staffs and their principals on pupil control ideology were examined.

H2: Principals and their staffs will have similar pupil control ideologies.

Hypothesis Three was developed from the work of McGregor's Theory X-Y (1960) and previous findings regarding pupil control ideology. Managers who make Theory X assumptions about human nature believe people must be coerced to get them to work because people are normally lazy. It was presumed that if principals held these beliefs about human beings they would similarly believe that students had to be closely controlled, as in a custodial approach to pupil control. If principals believed in Theory Y assumptions, that human beings do accept and seek responsibility, they would assume that students could exercise self-control and could be treated in a humanistic manner.

H3: Principals who hold Theory X assumptions about human nature will have a custodial pupil control ideology. Principals who hold Theory Y assumptions will have a humanistic pupil control ideology.

Hypothesis Four was also developed from McGregor's Theory X-Y (1960).

H4: Teachers in schools where the principals have Theory X orientations to human nature will have custodial pupil control ideologies. Teachers in schools where the principals have Theory Y orientations toward human nature will have humanistic pupil control ideologies.

Hoy (1968) (1969) reported that teachers became significantly more like their colleagues during their first year of teaching. Since Hypothesis Two did not control for first year teachers, Hypothesis Five was posited.

H5: Teachers who have been with their principals for two or more years will tend toward their principals' pupil control ideologies.

Williams (1972) found a positive correlation between school size and the pupil control orientations of teachers. Kozakewich (1973) did not find that school size was a good predictor of pupil control ideology. However, he surveyed teachers from three different types of schools (elementary, junior high and senior high). For the present study, school size was examined but the type of school was kept constant.

H6: Teachers in large elementary schools will be more custodial than their colleagues in small elementary schools.

In addition to the above research hypotheses, further analysis of the data involved the relationships between the following variables and the pupil control ideologies of the instructional staffs.

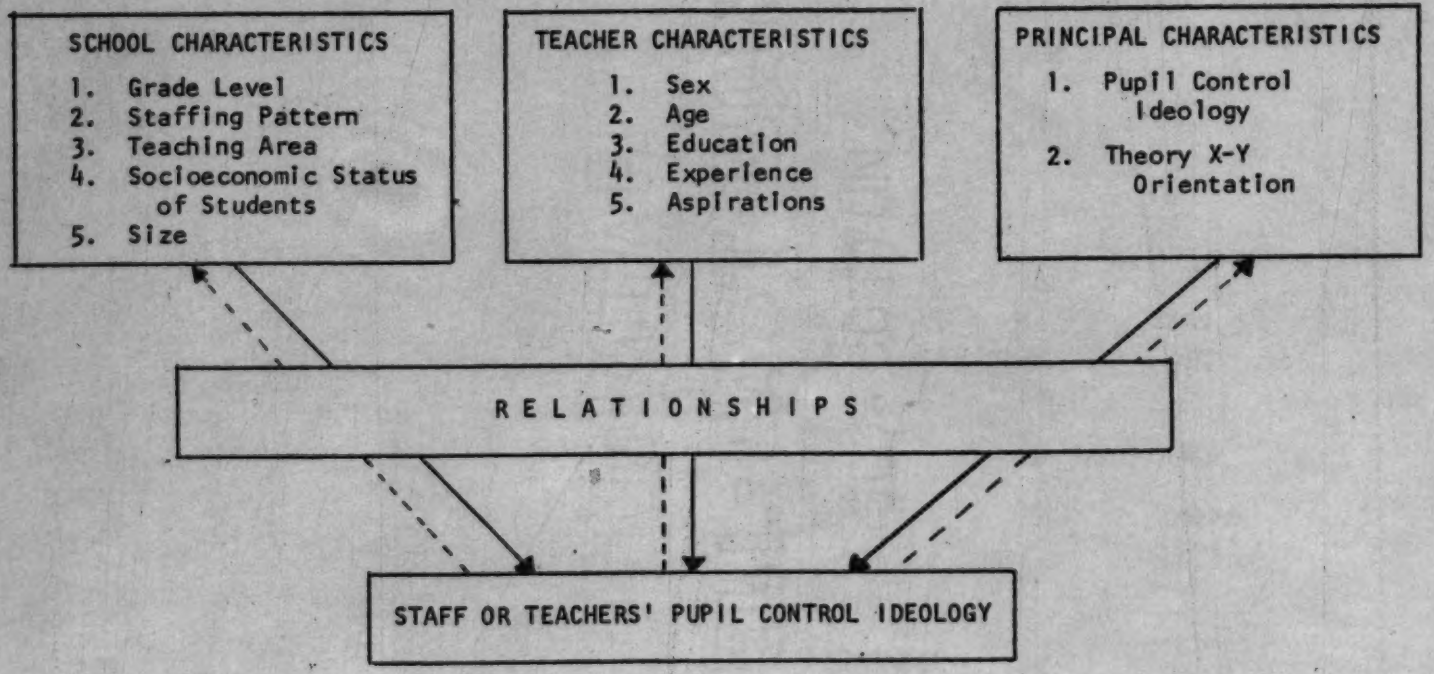
1. Sex
2. Age
3. Education
4. Experience
5. Preference to remain a teacher
6. Preference to become an administrator
7. Grade level
8. Staffing assignment
9. Teaching area
10. Socio-economic status of students.

SUMMARY

The model which is presented in Figure 2.1 illustrates the conceptual framework for this study. Pupil control orientations of staffs are influenced by certain characteristics of the schools, the teachers and the principals. What relationships exist between these characteristics and the dependent variable, staff pupil control ideology? These relationships are the foci of this study.

FIGURE 2.1

A DIAGRAM OF THE CONCEPTUAL FRAMEWORK



——▶ Relationships examined in this study.

– – – –▶ Relationships not addressed in this study.

Chapter 3

INSTRUMENTATION, METHODOLOGY AND RESPONDENTS

This chapter describes the instruments, the method of data collection, the schools and the educators used in the study.

INSTRUMENTATION

Two instruments were used in this study:

1. Pupil Control Ideology Form, and
2. Theory X-Y Scale.

Each of the instruments has been reproduced in Appendices C and D.

PCI Form

The principals and teachers were asked to respond to the PCI Form. Responses to the 20 Likert-type items ranged from "strongly disagree" to "strongly agree" on a five-point scale. If strong agreement was the response the respondent wished to make, he indicated by putting the numeral 5 beside the item. If he strongly disagreed with an item, he indicated this by putting the numeral 1 beside the item. The numerals 2, 3 and 4 were used to indicate less disagreement, neutrality and less agreement respectively. Eighteen of the 20 items were congruent with a custodial orientation toward pupil control. Scores on items 5 and 13 were reversed because these 2 items were indicative of a humanistic pupil control orientation. The 20 individual item scores were summed (after scores on numbers 5 and 13

were reversed, that is, a five was scored as a 1, a four was scored as a 2, etc.). The larger the sum of scores, the more custodial the respondent's pupil control orientation was. The theoretical range of scores was from 20 to 100. Examples of items in the PCI Form were:

1. It is desirable to require pupils to sit in assigned seats.

10. Being friendly with pupils often leads them to become too familiar.

Whenever any of the respondents failed to respond to an item or items, the mean score of the items that were completed was substituted for each of the items that were left blank. For example, if 17 items were completed for a sum of 34 on those items, a score of 2 was inserted into the 3 blanks.

The reliability of the PCI Form was checked by the original developers using a split-half method. Kerlinger (1973:443) has defined reliability as "the accuracy or precision of a measuring instrument." Willower, Eidell and Hoy (1973:12) calculated a split-half reliability coefficient by correlating even-item subscores with odd-item subscores. The resultant Pearson product-moment correlation coefficient was 0.91 (N = 170). When the Spearman-Brown formula was applied to the Pearson r, a corrected coefficient was calculated to be 0.95. When these same researchers conducted further reliability measures using the results from 55 subjects, Pearson product-moment correlation coefficients and Spearman-Brown corrected coefficients were calculated to be 0.83 and 0.91 respectively. The same coefficients of reliability were calculated for this study, that is, Pearson product-moment

correlation coefficients and Spearman-Brown corrected coefficients for the even-item and odd-item subscores. The Spearman-Brown coefficient was computed using the formula from Ferguson (1971:367), $r = \frac{2r}{1+r}$. In addition, the Kuder-Richardson test was applied to the two PCI subscores (odd-item and even-item subscores).

TABLE 3.1

CORRELATION COEFFICIENTS FOR EVEN-ITEM AND ODD-ITEM SUBSCORES ON THE PCI FORM

		Reliability Coefficients		
Instrument	N	Pearson	Spearman-Brown	KR-20
Principal PCI	29	0.74*	0.85*	0.84*
Teacher PCI	319	0.73*	0.84*	0.85*

*$p < .0005$ (two tailed)

Table 3.1 reports that the Pearson coefficients were 0.74 and 0.73 and the Spearman-Brown corrected coefficients were 0.85 and 0.84 for the principals' and teachers' PCI Forms respectively. The KR-20 reliability coefficients for the principals' and teachers' PCI Forms were computed to be 0.84 and 0.85 respectively. These three measures of the internal consistency or homogeneity of the items of the PCI Form were high enough ($p < .01$) to consider the instrument a relatively reliable measure of pupil control ideology.

Willower, Eidell and Hoy (1973) also reported on the validity of the PCI Form. A number of previous researchers had noted the

apparent importance of pupil control in public schools. Waller (1932) had noted the authoritarian figure of the teacher and the relatively submissive position of the pupil. Becker (1961) had emphasized the position of authority that the teacher held. Carlson (1964) had included the public school in a category in which neither the client nor the organization had much choice over participation. In 1963, Willower and Jones had observed that pupil control seemed to be an "integrative theme" in public schools. The PCI Form, as developed by Willower, Eidell and Hoy (1973:10), was based on the above literature, their experiences in public schools, field notes from previous research and the control conceptualization formulated by Gilbert and Levinson (1957). Construct validity of the PCI Form was based on these studies and experiences. Criterion-related (concurrent) validity was checked by using a panel of judges who knew the teachers involved in the original sample. The principals were asked to identify teachers who fitted the descriptions of custodial and humanistic teachers. The identified teachers completed the PCI Form. The mean PCI scores of the identified custodial and humanistic teachers were compared with the use of a t-test. The difference in the means was as predicted and significant at the .01 level. "By the standards usually applied, the instrument appeared to us to be relatively reliable and valid" (Willower et al., 1973:14).

A test of the construct validity was undertaken for the present study. A principal components factor matrix with varimax rotation was computed for the 20 items in the PCI Form, using the 319 responses from the teachers in the study. The factor matrix in Appendix F demonstrates the observation that the items of the PCI Form did discriminate

relatively well. Sixteen of the 20 items did load uniquely on Factor 1. Items numbered 5, 8, 13 and 19 appeared to require further refinement. Factor 1 accounted for 66.5% of the variance. This was considered to be a very substantial proportion of the variance contributed by the one factor in the factor analysis.

Theory X-Y Scale

The Theory X-Y Scale was originally prepared by J.H.A. Wallin at the University of British Columbia. The original items with a modified response format were utilized by Professor J.H. Balderson. The instrument contains 12 Likert-type items which measure the respondent's managerial philosophy in terms of McGregor's Theory X-Y orientations. The respondents were required to indicate their agreement or disagreement with the items by using a six-point scale, ranging from 1 indicating strong disagreement to 6 indicating strong agreement. Strong agreement with items 1, 4, 5, 8, 10, 12 indicated a strong Theory X orientation and a weak Theory Y orientation. A tendency to agree with items 2, 3, 6, 7, 9, 11 indicated a strong Theory Y orientation and a weak Theory X orientation. For scoring purposes the Theory Y items were reversed; 6 became 1, 5 became 2, 4 became 3, etc., before the sum of the scores could be computed. When the 12 item scores were summed (after reversing the Theory Y item scores), higher scores indicated a strong Theory X orientation and a weak Theory Y orientation. Low scores indicated a strong Theory Y orientation and a weak Theory X orientation. The theoretical range of scores for the Theory X-Y Scale was from 12 to 72. Examples of Theory X items were:

1. Most people need supervisors who will watch them closely enough to be able to praise good work and reprimand errors.

12. Most people need to be "inspired" (pep talk) or given some sort of "push" from time to time.

Examples of Theory Y items were:

3. By and large the majority of people are naturally active, not lazy; they like to set goals and enjoy striving.

11. Most people enjoy learning and increasing their understanding and capability; it is never too late to learn.

The reliability of the Theory X-Y Scale was assessed. No previous reports of the instrument's reliability were available. The instrument was split into the even and odd items. The even-numbered subscores (sums of the 6 even-numbered items) were correlated with the odd-numbered subscores. The resultant Pearson product-moment correlation coefficient ($N = 29$) was 0.57. When the Spearman-Brown formula was applied to the Pearson r, the corrected coefficient was calculated to be 0.73. In addition, the Kuder-Richardson reliability coefficient was computed to be 0.72. These three measures of the reliability of the Theory X-Y instrument were considered to be adequate ($p < .01$). The results of the three tests of reliability are reported in Table 3.2.

The construct validity of the Theory X-Y Scale was assessed by factor analyzing the responses to the items. A principal components factor analysis with varimax rotation was performed on the 29 principals' Theory X-Y scores. Appendix G contains the results of the factor analysis. Factor I accounted for 57.9% of the total variance. This

TABLE 3.2

CORRELATION COEFFICIENTS FOR EVEN-ITEM AND ODD-ITEM SUBSCORES ON THE THEORY X-Y SCALE

		Reliability Coefficients		
Instrument	N	Pearson	Spearman-Brown	KR-20
Theory X-Y Scale	29	0.57*	0.73*	0.72*

*$p < .001$ (two tailed)

factor could be named the Theory Y factor because five of the six Factor Y items loaded uniquely on Factor 1. Factor 2 accounted for 42.1% of the communality. This factor could be called the Theory X factor because three of the six Theory X items loaded uniquely on it. Items 1, 5 and 8 appeared to require further refinement because of their high loadings on Factor 1. With the above qualifications in mind, the construct validity was deemed to be acceptable.

Data Processing

The data were processed using the facilities of Computing Services at the University of Alberta. Most of the analyses were conducted by using the programs found in Statistical Package for the Social Sciences (Nie, et al., 1975).

Pearson correlation coefficients were computed for pairs of variables using the PEARSON CORR subprogram (Nie et al., 1975:280-8). These coefficients were zero-order correlations because no controls

for the influence of other variables were made. Pearson correlations are measures of the strength and direction of the relationship between two variables.

For the factor analyses of the two major instuments, the subprogram FACTOR was used (Nie et al., 1975:478-513). There were five methods of factoring available in this subprogram. The principal factoring with iterations (PA2) was employed because "this is the most widely accepted factoring method" (Nie et al., 1975:480). Varimax rotation was used because "Varimax is probably the best method of analytic (computer) orthogonal rotation" (Kerlinger, 1973:680). Only factors with eigenvalues greater than 1.0 were examined.

Subprogram FREQUENCIES (Nie et al., 1975:194-202) was used to compute and present frequency distributions for categorical variables. Frequency distributions were required for responses to the personal data items in the teacher's and principal's questionnaires. (See Appendices A and B).

To compare the means of two groups of respondents, the t-test was employed. The t-test is a parametric test "that is used to determine just how great the differences between means must be for it to be judged significant, that is, a significant departure from differences, which might be expected by chance alone" (Popham and Sirotnik, 1973:124). The subprogram T-TEST (Nie et al., 1975:267-75) was used when t-tests were required. The t-test "assumes that the distributions of the variables in the populations from which the samples are drawn are equal...(and) that these populations have equal variances" (Ferguson, 1971:153). The homogeneity of variance test (F-test) was applied to the data to check for similar variances. If

the F-test proved to be significant ($p < .05$), the variances were not homogeneous and the separate variance estimates of the t-ratio, degrees of freedom and probability level were reported. If the F-test was not significant ($p < .05$), the variances were homogeneous and the pooled variance estimates of the t-ratio, degrees of freedom probability level were reported.

The chi-square was employed to determine if the expected frequencies were significantly different from the observed frequencies. This test is available in the subprogram CROSSTABS (Nie et al., 1975: 218-48).

An additional program was provided by the Division of Educational Research Services. This program was used to calculate the KR-20 reliability coefficient for the even-item and odd-item subscores of the PCI Form and Theory X-Y Scale.

Unless otherwise stipulated, the probability level that was deemed acceptable in this study was $p < .05$.

METHODOLOGY

This section describes the determination of the research site and how the data were collected.

Determination of the Research Site

In January, 1974 nine school systems within the greater metropolitan area of a western Canadian city were identified as potential research sites. After discussions and correspondence with Provincial Department of Education officials and with District Superintendents or their representatives, two systems provided consent for the collection of data. Since only one of these systems was in a

position to provide data for the 1973-4 school year, it was chosen as the research site. The School Board of the system officially endorsed the project.

Administration and Collection of Questionnaires

A meeting, called by the Superintendent, was attended by the principals of the system's elementary schools. At this meeting, a general description of the project was presented by Professor J.H. Balderson. Questions regarding the nature of the study were answered by the director of the project, Professor Balderson. The principals took packets of pre-coded questionnaires to their schools for distribution. At staff meetings in each school, the principals provided information about the study and distributed questionnaires to teachers. Each school was provided with copies of a guide for the administration of the questionnaires. Participation by individual teachers was voluntary and anonymity of individual teachers was guaranteed. Most of the schools allowed approximately three or four days for the questionnaire to be completed.

The questionnaires were collected by the secretary in each school. Using the system's express service, the secretaries forwarded the questionnaires to the central office where they were deposited for collection. There was one exception to this procedure: the questionnaires were collected directly from one school on the last day of the school year.

Coding

A code number was assigned to each school in the following manner. After arranging the names of the schools in alphabetical order,

the schools were numbered consecutively 1 through 41. A table of random numbers was then used to identify the first school to be coded. The first number (1 to 41) to appear in the table of random numbers resulted in the school name with the corresponding number being coded as School 1. This process was continued until all 41 schools were coded. As a result, no systematic relationship between the original alphabetical list and the assigned numerical list existed.

After the school codes were established, these were affixed to each questionnaire in each school's package of returned questionnaires. The questionnaires within a package were numbered consecutively from 1 to the total number of respondents from that school. Therefore, it was impossible to identify individual respondents through the use of a code key. Only the original data collector, J.H. Balderson, had access to the code key by which identification of schools by name could be accomplished.

Response Rate

As previously mentioned, there were 41 schools in the school system which was the designated research site. Of the 600 teachers in these 41 schools, 426 returned questionnaires for a 71% overall rate of return. In order to qualify for this study, each school had to reach an arbitrarily-imposed 60/60 level. A school had to return "usable" questionnaires from 60% or more of its full-time staff. A "usable" return was here defined as a questionnaire in which responses were given to 60% or more of the items in the 2 major instruments - the PCI Form and the Theory X-Y Scale. This meant that the teacher-respondents had to complete 60% or more of the 20 items in the PCI

Form. Principal-respondents had to complete 60% or more of the 12 items in the Theory X-Y Scale and of the 20 PCI Form items.

Of the 41 original schools, 10 were eliminated because at least 60% of the full-time staff did not complete 60% of the appropriate instruments. The 10 schools which were eliminated were the schools numbered; 02, 04, 06, 17, 18, 21, 22, 24, 30 and 36. Thus of the 426 original teacher-respondents, 87 were eliminated because their school did not reach the 60% return rate. A further 20 teacher-respondents in the 31 schools were eliminated because they did not respond to 60% of the items on the PCI Form. Of the original 426 teacher-respondents, 319 met the requirements of the 60/60 rule. These 319 respondents constituted 76% of the 420 teachers in the 31 schools studied. The 319 teachers completed more than 95% of the items in the PCI Form. See Appendix E for further information on the response rate.

In the 41 schools, there were 5 principals who administered 2 schools of which one school was larger and was considered the main school and the other school was the satellite school. The following pairs of schools had common principals; 01 and 34, 02 and 36, 05 and 20, 06 and 19, 18 and 29. In each pair, the first school was the main school. If a school was eliminated by failing to achieve the 60/60 rule, the principal was also excluded from the study. This would suggest that there were 31 principals in the study. However, because of the overlap of the above-mentioned principals, principals of schools 20 and 34 (the smaller of the 2 schools administered by one principal) were not included. The 29 principals of the 31 schools completed more than 99% of the items in the two major instruments - the PCI Form and

the Theory X-Y Scale. The teachers in schools 01 and 34 were treated as one staff, as were the teachers in schools 05 and 20. Therefore, unless otherwise noted, the analyses in Chapters 4 and 5 treat the responses from the 319 teachers as if they were in 29 schools (not 31) with 29 principals.

RESPONDENTS

In order that the characteristics of the educators could be described, they were requested to supply background data. Compilations of the responses are presented below.

Sex

The sex of the 29 principals and 317 of the teachers is reported in Table 3.3.

TABLE 3.3

SEX OF THE RESPONDENTS

	Principals		Teachers	
	Number	Per Cent of Total	Number	Per Cent of Total
Male	28	97	69	22
Female	1	3	248	78
No response	-	-	2	1

Table 3.3 illustrates the distributions of principals and teachers by sex. The majority of principals were male but the

majority of teachers were female. Males have traditionally been appointed to the position of principal.

Age

Table 3.4 displays the number of respondents in each of the age categories. The teachers were younger than the principals. Sixty-five per cent (65%) of the teachers were 35 years old or younger, but only 3% of the principals were 35 or fewer years old. The modal decade for the teachers was from 26 to 35 but the modal decade for the principals was from 46 to 55.

TABLE 3.4

AGE OF THE RESPONDENTS

	Principals		Teachers	
Age	N	Per Cent of Total	N	Per Cent of Total
Less than 26	-	-	61	19
26 to 35	1	3	146	46
36 to 45	7	24	60	19
46 to 55	14	48	32	10
56 to 65	7	24	19	6
More than 65	-	-	-	-
No response	-	-	1	-

Grade Level

Public elementary schools in the province from which the educators were drawn include kindergarten to grade seven. The teachers were requested to indicate the grade level to which they were assigned. Table 3.5 contains a compilation of the responses to this question. This study has a representation of teachers from each of the grade levels offered in the schools. The "other" category included remedial teachers, librarians and any other teachers who did not fit the grade level categories.

Academic Qualifications

The teachers in this study had less formal university training than the principals. While 78% of the teachers had a Bachelor's degree or less, 90% of the principals had more than a Bachelor's degree. Twenty-four per cent (24%) of the principals had at least a Master's degree but only 4% of the teachers had similar qualifications. A summary of the academic backgrounds of the educators is reported in Table 3.6.

Salary

Principals' salaries were substantially higher than teachers'. All of the principals earned in excess of $20,000. Eighty-nine per cent (89%) of the teachers' salaries were below $16,000. The salaries of the educators is reported in Table 3.7.

TABLE 3.5

GRADE LEVELS TAUGHT BY TEACHER-RESPONDENTS

	Teachers	
Grade Level	Number	Per Cent of Total
Kindergarten	24	8
Grade 1	45	14
Grade 2	30	9
Grade 3	33	10
Grade 4	37	12
Grade 5	43	13
Grade 6	32	10
Grade 7	39	12
Other*	36	11
No response	-	-

*Other category included remedial teachers, librarians, and those teachers who did not fit the grade level categories

TABLE 3.6

ACADEMIC QUALIFICATIONS OF THE RESPONDENTS

	Principals		Teachers	
Qualifications	Number	% of Total	Number	% of Total
Less than Bachelor's Degree	-	-	108	34
Bachelor's Degree	3	10	139	44
More than Bachelor's Degree	19	68	57	18
Master's Degree	6	21	12	4
More than Master's Degree	1	4	1	0
Doctor's Degree	-	-	-	-
No response	-	-	2	1

TABLE 3.7

SALARY OF THE RESPONDENTS

	Principals		Teachers	
Salary (annual)	Number	% of Total	Number	% of Total
Less than $6,000	-	-	2	1
$6,000 to 7,999	-	-	3	1
$8,000 to 9,999	-	-	52	16
$10,000 to 11,999	-	-	116	36
$12,000 to 13,999	-	-	67	21
$14,000 to 15,999	-	-	46	14
$18,000 to 19,999	-	-	5	2
$20,000 and more	N/A	N/A	8	3
$20,000 to 21,999	5	17	N/A	N/A
$22,000 to 23,999	12	41	N/A	N/A
$24,000 and more	12	41	N/A	N/A
No response	-	-	2	1

N/A is inserted where the principals and the teachers were not given that alternative response.

Experience

The principals and the teachers were relatively similar in the amount of experience in their respective positions. Eleven per cent (11%) of the principals and nine per cent (9%) of the teachers had fewer than 3 years of experience in their positions. Table 3.8 contains a summary of the years of experience of the respondents.

Years in Present School

The principals were a relatively stable group; almost one half of them (47%) had spent 6 or more years in their present school. This compared to approximately one quarter (26%) of the teachers who had taught in their present school for 6 or more years. The number of years of experience in present schools is reported in Table 3.9.

Socioeconomic Status and Ability of Students

A noteworthy feature of Table 3.10 is the strong agreement among the perceptions of the teachers and the principals. Most of these educators agreed that their students were from a general cross-section of society and that the academic ability of their students was halfway between the extremes of very low and very high.

Staffing Arrangement and Teaching Area

Approximately 94% of the educators saw the staffing arrangement with which they were involved as being mainly one teacher per classroom. Similar agreement was evident when the respondents were asked to describe their type of teaching area; 88% of the total

TABLE 3.8

EXPERIENCE OF THE RESPONDENTS IN THEIR PRESENT POSITIONS

	Principals		Teachers	
Experience	Number	% of Total	Number	% of Total
1 year	1	3	29	9
2 years	2	7	15	5
3 to 5 years	3	10	79	25
6 to 9 years	10	34	71	22
10 to 14 years	4	14	57	18
15 to 21 years	8	28	40	13
22 to 34 years	1	3	21	7
35 to 43 years	-	-	6	2
44 and more years	-	-	-	-
No response	-	-	1	-

TABLE 3.9

EXPERIENCE OF THE EDUCATORS IN THEIR POSITIONS IN THE PRESENT SCHOOL

	Principals		Teachers	
Experience	Number	% of Total	Number	% of Total
1 year	1	3	91	29
2 years	6	21	47	15
3 to 5 years	8	28	95	30
6 to 9 years	12	41	52	16
10 to 14 years	1	3	20	6
15 to 21 years	1	3	9	3
22 to 34 years	-	-	2	1
35 to 43 years	-	-	-	-
44 and more years	-	-	2	1
No response	-	-	1	0

TABLE 3.10

STUDENTS' SOCIOECONOMIC STATUS AND ABILITY LEVEL AS PERCEIVED BY THEIR PRINCIPALS AND TEACHERS

	Principals		Teachers	
Status	Number	% of Total	Number	% of Total
All Professional and White Collar	-	-	5	2
Most Professional and White Collar	5	17	43	13
General Cross-Section	18	62	201	63
Most Factory and Blue Collar	5	17	48	15
All Factory and Blue Collar	1	3	18	6
Rural	-	-	1	0
No response	-	-	3	1
Ability Level				
1 (very low)	1	3	8	3
2	2	7	38	12
3	4	14	81	25
4	15	52	135	42
5	7	24	47	15
6 (very high)	-	-	7	2
No response	-	-	3	1

TABLE 3.11

STAFFING ARRANGEMENTS AND TEACHING AREAS IN THE SCHOOLS

	Principals		Teachers	
Staffing Arrangement	Number	% of Total	Number	% of Total
All Traditional	-	-	57	18
Mainly Traditional	27	93	243	76
Mainly Teams	1	3	10	3
All Teams	-	-	7	2
No response	1	3	2	1
Teaching Area				
All Traditional	8	28	81	25
Mainly Traditional	18	62	199	62
Mainly Open	3	10	24	8
All Open	-	-	14	4
No response	-	-	1	0

educators considered their teaching area to be mostly or all traditional classrooms. Table 3.11 reports a summary of the responses to the descriptions of the staffing arrangements and teaching areas.

SUMMARY

The two major instruments used in this study (PCI Form and Theory X-Y Scale) were described in this chapter. The development of the two instruments was also presented. To test the reliability of the instruments, three statistical measures were computed. All reliability measures were significant ($p < .01$); the instruments were considered to yield reliable results. Factor analysis of the PCI Form produced one major factor; the same procedure produced two major factors in the Theory X-Y Scale. The construct validity of both instruments was considered to be acceptable; the instruments did yield valid results.

How the research site was determined and how the data were collected, coded and processed was described in this chapter. The respondents were described by using their responses to the background questions.

Chapter 4

ANALYSIS OF DATA

The analysis of the data to test the hypotheses previously posited is presented in this chapter. The presentation of the findings is organized on the basis of the original six hypotheses outlined in chapter 2.

HYPOTHESIS ONE

H1: Principals of elementary schools are more humanistic than the teaching staffs of elementary schools.

The t-test was employed to compare the principals' and teachers' PCI scores.

Table 4.1 reports the results of the analysis for Hypothesis One. The computed 't' of -2.01 was significant at the $p < .05$ level. The Null Hypothesis was therefore rejected. Since the direction of the statistically significant difference in means was as predicted, Hypothesis One was confirmed. For these educators, there was a relationship between organizational position and pupil control ideology. Principals tended to be more humanistic in their pupil control ideologies than were teachers.

HYPOTHESIS TWO

H2: Principals and their staffs will have similar pupil control ideologies.

TABLE 4.1

A COMPARISON OF THE PUPIL CONTROL IDEOLOGY SCORES OF PRINCIPALS AND TEACHERS

Position	N	Mean PCI Score	Standard Deviation	F
Principal	29	42.98	9.42	1.35
Teacher	319	46.89	10.95	

Separate Variance Estimate:

df	t
346	-2.01*

*p = .03 (one tailed)

In order to determine if a systematic relationship existed between a principal's PCI score and his staff's mean PCI score, two tests were used: the t-test and a Pearson product-moment correlation.

In Table 4.2, results of the analysis indicated that there was no statistically significant correlation between the principals' PCI scores and the staffs' PCI scores.

A t-test was also used to measure the mean difference on PCI between staffs of custodial principals and staffs of humanistic principals. Custodial principals were arbitrarily defined as those who scored above the principals' mean PCI score (42.98). Conversely,

TABLE 4.2

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN PRINCIPALS' PCI AND STAFFS' PCI SCORES

PCI Score	N	Pearson Correlation	p (one tailed)
Principals' PCI	29	0.229	.12
Staffs' PCI	29		

the humanistic principals were operationally defined as those who scored below the mean. Table 4.3 presents the results of the comparisons of staffs' PCI scores for schools with custodial and humanistic principals.

TABLE 4.3

A COMPARISON OF STAFFS' MEAN PCI SCORES FOR CUSTODIAL AND HUMANISTIC PRINCIPALS

Principal's PCI	N	Staffs' Mean PCI Scores	St. Dev.	F
Custodial	12	46.56	4.70	1.02
Humanistic	17	47.12	4.75	

Pooled Variance Estimate:

df	t
27	-0.32*

*p = .38 (one tailed)

The difference between the means was not statistically significant ($p < .05$). Furthermore, the data suggested that the direction of a possible difference was in the direction opposite to that hypothesized. Therefore, the Null Hypothesis associated with H2 was accepted. There was no statistically significant relationship between the principals' and their staffs' PCI scores. The staffs of custodial principals were not more custodial than the staffs of humanistic principals.

HYPOTHESIS THREE

H3: Principals who hold Theory X assumptions about human nature will have a custodial pupil control ideology. Principals who hold Theory Y assumptions will have a humanistic pupil control ideology.

Hypothesis Three was subjected to analysis by employing a Pearson product-moment correlation coefficient and a t-test for the difference between the means on PCI scores of principals who prefer Theory X and Theory Y assumptions about human nature.

Table 4.4 reports that the substantial positive correlation ($r = .59$) between principals' Theory X-Y and PCI orientations was significant at the $p < .05$ level.

The analysis of the data using a t-test is presented in Table 4.5. The principals were divided into two groups using the mean on the Theory X-Y Scale. The 16 principals who scored above the mean (32.59) were defined as Theory X principals, while those below the mean were defined as Theory Y principals.

TABLE 4.4

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENT BETWEEN PRINCIPALS' X-Y SCORES AND PCI SCORES

Measures	N	Pearson Correlation	p (one tailed)
Principals' X-Y	29	0.59	.001
Principals' PCI	29		

TABLE 4.5

A COMPARISON OF MEAN PCI SCORES FOR THEORY X AND THEORY Y PRINCIPALS

X-Y Orientation	N	Mean PCI Score	St. Dev.	F
'X' Principals	16	45.77	8.37	1.37
'Y' Principals	13	39.54	9.80	

Pooled Variance Estimate:

df	t
27	1.85*

*p = .04 (one tailed)

The results in Table 4.5 show that the mean PCI scores were significant at the $p < .05$ level. Given the results of these tests, the Null Hypothesis was rejected. As predicted, a positive correlation existed between the Theory X-Y orientation of principals and their PCI orientation. Theory X principals tended to be custodial and Theory Y principals tended to be humanistic in their pupil control orientations.

HYPOTHESIS FOUR

H4: Teachers in schools where the principals have Theory X orientations to human nature will have custodial pupil control ideologies. Teachers in schools where the principals hold Theory Y orientations toward human nature will have humanistic pupil control ideologies.

In order to determine whether there was a relationship between principals' Theory X-Y orientations and their staffs' pupil control orientations, a Pearson product-moment correlation coefficient was computed. H4 predicted that the correlation would be positive and significant.

Table 4.5 reports that the Pearson correlation coefficient between principals' X-Y orientations and their staffs' PCI was .42. The Pearson r was significant at the .01 level, within the acceptable $p < .05$ level.

In addition, a t-test was employed to determine if there was a significant difference in the staffs' mean PCI scores, divided into two groups on the basis of their principals' Theory X-Y scores. The 16 principals who scored above the mean (32.59) on the Theory X-Y

TABLE 4.6

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENT
BETWEEN PRINCIPALS' X-Y SCORES AND
THEIR STAFFS' MEAN PCI SCORES

Measures	N	Pearson Correlation	p (one tailed)
Principals' X-Y	29	0.42	.01
Staffs' PCI	29		

Scale were considered to be Theory X principals. The 13 principals who scored below the mean on the Theory X-Y Scale made up the group of Theory Y principals.

TABLE 4.7

A COMPARISON OF STAFFS' MEAN PCI SCORES
FOR THEORY X AND THEORY Y PRINCIPALS

X-Y Orientation	N	Staffs' Mean PCI Score	St. Dev.	F
'X' Principals	16	48.22	8.37	1.69
'Y' Principals	13	45.25	9.80	

Pooled Variance Estimate:

df	t
27	1.77*

*p = .04 (two tailed)

Table 4.7 reports the results of the analysis of H4 using a t-test. The computed 't' of 1.77 was significant at the $p < .05$ level. Since both analyses of H4 resulted in statistically significant results ($p < .05$), the Null Hypothesis was rejected. For these educators, there was a relationship between the principals' Theory X-Y orientations and their staffs' pupil control orientations. Teachers, whose principals held Theory X assumptions, were significantly more custodial than teachers whose principals held Theory Y assumptions. Teachers, whose principals held Theory Y assumptions, were significantly more humanistic than teachers whose principals held Theory X assumptions.

HYPOTHESIS FIVE

H5: Teachers, who have been with their principals for two or more years, will tend toward their principals' pupil control orientation.

To examine the relationship between teachers' length of service with their principals and staff PCI, a Pearson product-moment correlation coefficient was computed. To be included in this analysis, teachers had to indicate that they had been with their present principal for 2 or more years. Of the 319 teachers in the 31 schools, 227 teachers (71.2%) responded that they had been with the same principal in their present school for 2 or more years. When the criterion of 2 or more years of teaching experience with their present principal was used, two schools had to be dropped from the analysis because all of the teachers reported they were in their first year of

teaching with their present principal. Schools 07 and 31 had to be eliminated. Thus there were 27 principals and 27 staffs in the analysis.

TABLE 4.8

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENT BETWEEN PRINCIPALS' PCI SCORES AND STAFFS' MEAN PCI SCORES (TEACHERS WITH 2 OR MORE YEARS OF ASSOCIATION WITH THEIR PRESENT PRINCIPAL)

Measures	N	Pearson Correlation	p (one tailed)
Principals' PCI	27	0.17	.20
Staffs' PCI	27		

Table 4.8 reports the results of the analysis of H5 using a Pearson correlation. Since the Pearson correlation was not significant ($p < .05$), the Null Hypothesis was accepted. For these educators, there was no systematic relationship between the pupil control orientations of the principals and the pupil control orientations of the teachers who had been with them for 2 or more years.

HYPOTHESIS SIX

H6: Teachers in large elementary schools will be more custodial than their colleagues in small elementary schools.

Small schools were arbitrarily designated as those with fewer than the mean number of teachers. The 31 schools had 420 teachers for a mean size of staff of 13.5. Therefore, the 18 schools with 14 or more teachers composed the group of large schools. The student populations of these large schools ranged from 315 to 540. The 13 schools with 13 or fewer teachers were designated as the small schools. The student populations in the small schools ranged from 120 to 300. Even though it had not been predetermined, all of the schools would have been similarly designated if student population had been the criterion used. Large schools could have described those with pupil populations in excess of 300 pupils; small schools could have been those with less than 300 pupils.

To test for a relationship between school size and staff PCI, a Pearson product-moment correlation coefficient between the number of teachers in the schools and the staffs' mean PCI score was computed. For this analysis, all 31 staffs' mean PCI scores were used. Thus, the scores of the principals who administered 2 schools were used twice.

The results of the Pearson correlation ($r = .50$) are reported in Table 4.9. The Pearson r was significant at the $p < .05$ level.

A t-test was also computed to determine if the difference in the staffs' mean PCI scores was significant.

Table 4.10 reports the results of the second test for H6. The computed 't' of 1.88 was significant at the $p < .05$ level. Since both the Pearson r and the computed 't' were significant ($p < .05$), the Null Hypothesis was rejected. For these educators, the size of school did influence the pupil control orientations of the staffs.

TABLE 4.9

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENT

BETWEEN SIZE OF SCHOOL AND STAFF PCI

Measures	N	Pearson Correlation	p (one tailed)
Size of School	31	0.50	.002
Staffs' PCI	31		

TABLE 4.10

A COMPARISON OF STAFFS' MEAN PCI SCORES

FOR LARGE AND SMALL SCHOOLS

Size of School	N	Staffs' Mean PCI Score	St. Dev.	F
Large	18	47.95	3.99	1.90
Small	13	44.75	5.51	

Pooled Variance Estimate:

df	t
29	1.88*

*p = .04 (one tailed)

DISCUSSION

The theoretical framework which formed the basis of this study appeared to be accurate in relation to some of the hypotheses. Willower, Eidell and Hoy "hypothesized that those directly responsible for the control of unselected clients would be more custodial in their control ideology than thos less directly responsible for client control" (1973:6). These researchers proposed that, since teachers were in more direct contact with pupils, they would be more control-oriented. This hypothesis suggested that the position in the organization was important in determining the control orientation of the educator. There has been no report of an investigation into the control ideologies of teachers who are promoted to the position of principal. Were the principals chosen because of their more humanistic orientations? Did the control orientations of principals change after they assumed the position? It was also possible that teachers who were more custodial in their PCI went to teach at the junior or senior high level because they could control students. In this study, it was found that principals were significantly more humanistic than teachers. Because of his position it was proposed that principals' pupil control ideologies could influence their staffs' pupil control orientations. This was found to be an unsupported proposition; there was no significant correlation between the pupil control ideologies of principals and their staffs. As a matter of fact, the staffs of custodial principals scored slightly lower (more humanistic) than the staffs of humanistic principals. This difference between principals' and staffs' pupil control orientations may cause conflict between principals and

teachers over how pupils should be controlled. Willower, Eidell and Hoy "suggest that the organizational structure and task of the public school operates to reduce overt conflict and to increase personal tension for certain individuals" (1973:37). It would be likely that those teachers, who were considerably opposed to the principal's orientation to pupil control, would eventually transfer out of the school. The results of Hypotheses One and Two indicated that the position of the individual in the organizational structure of the school influenced the PCI of the educator but principals and teachers in the same school were not in agreement with pupil control ideology.

Significant results were obtained when the research hypotheses dealing with Theory X-Y orientations were subjected to appropriate tests. It was proposed that principals who had Theory X assumptions about human nature would have a custodial pupil control ideology. Principals, who assumed that people were basically lazy and must be coerced to get to work, also felt that pupils should be closely controlled because they were basically irresponsible and incapable of self-discipline. The staffs of the Theory X principals were also custodial in their pupil control orientation. If principals believed that human beings were basically lazy and irresponsible, it was likely that they would treat their staffs in a highly directive manner. This treatment may have influenced their staffs to believe their pupils should be treated in a custodial manner. Even though custodial principals were not found to be systematically associated with custodial staffs, principals who believed that their staffs had to be closely supervised had custodial staffs. It was also proposed that

principals who had Theory Y assumptions about human nature would have a humanistic pupil control ideology. Principals, who assumed that human beings did not inherently dislike work and could exercise self-direction, also agreed that pupils could be self-disciplining. The staffs of the Theory Y principals were also humanistic. Principals who believed that subordinates could exercise self-direction were less likely to treat their staffs in a highly directive manner. This treatment may have influenced the staffs of Theory Y principals to believe their pupils should be treated in a more humanistic manner. The Theory X-Y assumptions of the principals were a better predictor of the pupil control orientations of their staffs than their pupil control ideologies.

No support was found for the hypothesis that the longer the teachers taught with principals, the more similar their pupil control ideologies would be. The pupil control ideologies of the principals were previously found to be poor predictors of the pupil control orientations of their staffs. Even when the new (new here meant the teachers had been with their principals less than 2 years) teachers were eliminated, there was no significant relationship between the PCI of the principals and the PCI of their staffs.

The size of the school was a good predictor of the PCI of the staff. Teachers were more likely to know most of the pupils and hence would feel less threatened in the smaller schools. This finding supported the study conducted by Williams (1972).

SUMMARY

This chapter reported findings pertaining to the six hypotheses which were originally posited. The previous finding that elementary principals were more humanistic than elementary teachers was confirmed. A principal's Theory X-Y orientation was a good predictor of his own PCI score as well as the mean PCI score of his staff. A principal's PCI score was not a good predictor of his staff's mean PCI score. Even when the teachers who were only spending their first year with their principals were excluded, the principal's PCI did not correlate significantly with the pupil control ideology of his staff. School size was related to the staff's PCI score; teachers in large schools were significantly more custodial than teachers in small schools.

In conclusion, the hypothesized findings that were found to be significant were:

1. Teachers in elementary schools were more custodial than principals in elementary schools.

2. Principals who had Theory X assumptions about human nature were more custodial than principals who had Theory Y assumptions.

3. Principals who had Theory X assumptions about human nature had custodial staffs. Principals who had Theory Y assumptions about human nature had humanistic staffs.

4. Teachers in large elementary schools (with 14 or more teachers, more than 300 pupils) were more custodial than teachers in small elementary schools (13 or fewer teachers, less than 300 pupils).

Chapter 5

FURTHER ANALYSIS OF DATA

The analysis of the data related to the six research hypotheses was presented in Chapter 4. This chapter presents further examination of the dependent variable (staff PCI). The results of a regression analysis on the dependent variable are presented. In addition, the influence of certain personal and organizational variables was examined, and the results of these tests are reported.

FURTHER ANALYSIS OF STAFF PCI

The dependent variable in this study (staff PCI) was further examined to determine which of the four independent variables was the best predictor of staff PCI. For this analysis, the mean PCI scores of the teaching staffs of each school were used. The four predictor variables were: principals' PCI scores (PRINPCI), principals' Theory X-Y scores (PRINXY), number of teachers on staff (NOFSTAFF) and the PCI scores of the teachers who had been with their principal two or more years (EXPERPCI). The PCI scores of the principals in charge of two schools were included twice for this multiple correlation analysis.

Table 5.1 reports the results of the multiple correlation results. As can be seen in the table, the number of staff was the best correlate with staff PCI. Twenty-five per cent of the variance in the staff PCI scores was attributable to the number of staff. A

TABLE 5.1

SIMPLE AND MULTIPLE CORRELATION COEFFICIENTS FOR STAFF PCI

Simple Correlation Coefficients

	PRINPCI	PRINXY	NOFSTAFF	EXPERPCI	STAFFPCI
PRINPCI	1.000	0.560	-0.172	-0.054	0.151
PRINXY		1.000	-0.065	0.168	0.378
NOFSTAFF			1.000	0.437	0.502
EXPERPCI				1.000	0.398
STAFFPCI					1.000

Multiple Correlation Coefficents

Variable	Multiple R	R. Square	RSQ Change	Simple r
NOFSTAFF	.50	.25	.25	.50
PRINXY	.65	.42	.17	.38
EXPERPCI	.66	.43	.01	.40
PRINPCI	.66	.43	.00	.15

further seventeen per cent of the variance was accounted for by the principals' Theory X-Y scores. The PCI scores of the teachers with two or more years of experience with their principals and the principals' PCI scores contributed a negligible one per cent of the variance in the staff PCI.

TABLE 5.2

REGRESSION ANALYSIS OF STAFF PCI

Variable entered on step 1: NOFSTAFF

Multiple R	R Square	Adjusted R Square	Standard Error
0.50225	0.25226	0.22648	4.28657

Analysis of Variance:

	df	Sum of Squares	Mean Square	F
Regression	1	179.76961	179.76961	9.784*
Residual	29	532.86668	18.37471	

B	BETA	Standard Error of B	Constant
.437	.502	.1398	40.684

Variable entered on step 2: PRINXY

Multiple R	R Square	Adjusted R Square	Standard Error
0.64938	0.42169	0.38038	3.83649

Analysis of Variance:

	df	Sum of Squares	Mean Square	F
Regression	2	300.51330	150.25665	8.203*
Residual	28	412.12299	14.71868	

B	BETA	Standard Error of B	Constant
.304	.412	.1061	30.465

Variable entered on step 3: EXPERPCI

Multiple R	R Square	Adjusted R Square	Standard Error
0.65870	0.43389	0.37098	3.86549

Analysis of Variance:

	df	Sum of Squares	Mean Square	F
Regression	3	309.20258	103.06753	0.582
Residual	27	403.43372	14.94199	

B	BETA	Standard Error of B	Constant
.047	.126	.062	29.670

Variable entered on step 4: PRINPCI

Multiple R	R Square	Adjusted R Square	Standard Error
0.65925	0.43462	0.34763	3.93658

Analysis of Variance:

	df	Sum of Squares	Mean Square	F
Regression	4	309.72293	77.43073	0.034
Residual	26	402.91337	15.49667	

B	BETA	Standard Error of B	Constant
.017	.033	.093	29.287

*p < .01

Table 5.2 contains the results of the regression analysis of staff PCI. The best predictor of staff PCI was the number of teachers in the school. The only other predictor to make a significant ($p < .05$) contribution to the dependent variable was the principals' Theory X-Y orientation. From the multiple correlation analysis and the regression analysis, two variables emerged as good predictors of staff pupil control ideology. The influence of the number of teachers and the principals' Theory X-Y orientations on staff PCI lent further support to Hypotheses 4 and 6.

PERSONAL VARIABLES AND PCI

For the following investigations of the influence of personal variables on staff PCI, the total number of teachers was used. Unless otherwise stated, the N of teachers for the analysis was 319.

Sex

Heisel (1971a:44) reported that sex and pupil control ideology were significantly related. Willower, Eidell and Hoy (1973:30) also indicated that "the most substantial difference in the pupil control ideology of male and female educators occurred when all male teachers were compared with all female teachers." However, an intervening variable may have caused the higher PCI scores for males, namely, more males taught at the secondary level. Previous research had shown that secondary teachers were more custodial than elementary teachers. MacMillan (1973:133) had found that "male and female teachers had virtually identical mean PCI Form scores." In the present study there

were only elementary teachers so the intervening variable that was cited could not affect the results.

TABLE 5.3

SEX AND PUPIL CONTROL IDEOLOGY

Sex	N	Mean PCI Score	Standard Deviation	F
Male	69*	48.86	11.50	.49
Female	248*	46.77	10.80	

Pooled Variance Estimate:

df	t
315	1.40**

*2 teachers did not respond to this question

**p = .16 (two tailed)

Table 5.3 reports the results of the t-test for the differences between the mean PCI scores for male and female teachers. The computed 't' was not significant; the Null Hypothesis was accepted. There was no significant difference in the mean PCI scores for males and females. Even though the difference between the means did not reach an acceptable level of significance, it should be noted that the male teachers did have a higher mean PCI score. Later in this chapter, the effect of grade level on PCI is examined.

Age

Holzwarth (1974) reported that all the teachers who were 50 years of age and older had custodial orientations (scored above the median on the PCI Form) and greater percentages of humanistically oriented teachers were in the 20-29 age group. An attempt was made to check Holzwarth's findings.

TABLE 5.4

AGE AND PUPIL CONTROL IDEOLOGY

Age	N	Mean PCI Score	St. Dev.	F
25 years and less	62	48.45	10.17	1.20
26 years and more	257	46.45	11.14	

Pooled Variance Estimate:

df	t
317	.95*

*p = .34 (two tailed)

Age	N	Mean PCI Score	St. Dev.	F
55 years and less	300	47.02	10.82	1.39
56 years and more	19	51.21	12.77	

Pooled Variance Estimate:

df	t
317	1.62**

**p = .11 (two tailed)

Table 5.4 reports the results of the analysis using a t-test. In both instances the computed t-ratios were not significant at the $p < .05$ level. The chi square associated with the cross-tabulation of age and PCI score was 26.81 with a significance level of $p = .37$. For the present study, there was no significant relationship between the age of the teachers and their pupil control ideologies.

Education

Willower, Eidell and Hoy (1973:32) concluded that as the amount of education of elementary teachers increased, custodialism in pupil control ideology decreased. This finding was checked. Even though academic background was an ordinal variable, a Pearson correlation coefficient between education and PCI was computed. This coefficient was interpreted cautiously as Nie et al. (1975:276) have noted.

> Several social science methodologists argue that the Pearson correlation coefficents (and other statistics originally designed for interval-level variables) may be used even if the data satisfy only the assumptions of ordinal-level measurement. Since such a usage is not standard procedure, users should pursue it cautiously...

It was intended that this coefficient would give the direction of the relationship. The computed Pearson correlation coefficient ($r = -.08$) was insignificant but did indicate a negative relationship; as the amount of education increased, pupil control ideology decreased (became more humanistic). This was a similar finding to that of Willower, Eidell and Hoy. A chi square analysis to determine if the difference between the observed and expected frequencies was significant was also

computed. The significance of the chi square was 0.57. For the present study, there was no conclusive evidence to suggest that a relationship existed between the amount of education and the teachers' pupil control ideology.

Experience

A number of researchers have examined the effect of experience on teachers' pupil control ideologies. Hoy (1968) found that teachers became significantly more custodial as they moved from student teaching into full-time teaching in the classroom. Willower, Eidell and Hoy (1969) compared teachers with five or fewer years teaching experience with those having more than five years of experience and found that teachers with more experience were significantly more custodial. Helsel (1971a) confirmed that there was a significant correlation between teaching experience and custodialism. To test for a similar trend, the mean PCI score of teachers with five or fewer years of experience was compared with the mean PCI score of teachers with more than five years of experience.

Table 5.5 reports the results of the analysis using a t-test. The computed 't' was not significant ($p < .05$); the Null Hypothesis that there was no difference in the two means was accepted. These results were certainly not similar to those reported by previous researchers. For the teachers in the present study, experience was a poor predictor of pupil control orientation.

TABLE 5.5

EXPERIENCE AND PUPIL CONTROL IDEOLOGY

Experience	N	Mean PCI Score	St. Dev.	F
5 years and fewer	124	47.70	10.15	1.28
6 years and more	195	46.99	11.47	

Pooled Variance Estimate:

df	t
317	0.56*

*p = .58 (two tailed)

Preference to Remain a Teacher

In addition to supplying personal data, the teachers were requested to give personal preferences. One of the preferential items was: "Your preference to remain a full-time teacher in public education is: very weak 1 2 3 4 5 6 very strong." Previous research studies had shown that pupil control was a concern in public schools. Thus, it was proposed that those teachers who had a strong desire to remain full-time teachers would be concerned with pupil control and be more custodial. Those respondents who indicated 1, 2 or 3 formed the weak preference group; the strong preference group were those teachers who had indicated 4, 5 or 6. A t-test was employed to measure the significance of the difference in the two mean PCI scores.

TABLE 5.6

PREFERENCE TO REMAIN A TEACHER AND

PUPIL CONTROL IDEOLOGY

Preference	N	Mean PCI Score	Standard Deviation	F
Strong	240	47.42	10.45	1.35
Weak	79	46.82	12.23	

Pooled Variance Estimate:

df	t
317	0.42*

*p = .68 (two tailed)

The computed 't' reported in Table 5.6 was not significant ($p < .05$). There was no significant difference in the mean PCI scores for teachers who showed strong or weak preferences to remain teachers. The teachers' preferences to remain in the teaching force were not good predictors of their pupil control orientations.

Preference to Become an Administrator

Another item in the questionnaire asked the teachers to record on a six-point scale their preference to become an administrator. Again a response of 1 indicated a very weak preference and a response of 6 indicated a very strong preference. The six-point scale was halved and a t-test employed to determine if the difference in the mean PCI scores for teachers with a weak or strong preference was significant.

TABLE 5.7

PREFERENCE TO BECOME AN ADMINISTRATOR
AND PUPIL CONTROL IDEOLOGY

Preference	N	Mean PCI Score	Standard Deviation	F
Strong	71	47.55	11.22	1.06
Weak	248	47.19	10.91	

Pooled Variance Estimate:

df	t
317	0.24

$p = .81$ (two tailed)

The results of the analysis are reported in Table 5.7. The computed 't' was not significant ($p < .05$); the Null Hypothesis was accepted. For this study, it was apparent that teachers' aspirations to become administrators in education did not influence their pupil control orientation.

ORGANIZATIONAL VARIABLES AND PCI

The relationship between four organizational variables and teachers' pupil control ideologies was also examined. Unless otherwise noted, the number of respondents was the 319 teachers.

Grade Level

When examining the relationship between the sex of the respondents and their pupil control ideologies, mention was made of a possible intervening variable. Since most of the male teachers were in the upper grade levels of the elementary schools, the effect of the grade level on pupil control orientations was investigated. The 187 teachers who taught grades 4 to 7 or were librarians and remedial teachers comprised the one arbitrarily defined group of teachers. The remaining 132 teachers taught kindergarten and grades 1 to 3. A t-test was used to measure the significance of the difference in the mean PCI scores of the two groups.

TABLE 5.8

GRADE LEVEL AND PUPIL CONTROL IDEOLOGY

Grade Level	N	Mean PCI Score	St. Dev.	F
Kindergarten to grade 3	132	45.83	9.66	1.47*
Grades 4 to 7	187	48.29	11.72	

Separate Variance Estimate:

df	t
309.41	2.05**

*p = .02 (two tailed)

**p = .04 (two tailed)

Because the computed 't' was significant ($p < .05$), the Null Hypothesis that there was no statistically significant difference between the two means was rejected. The teachers in the primary grades (kindergarten to grade 3) were significantly more humanistic than the teachers who taught grades 4 to 7 or were librarians and remedial teachers. A Pearson correlation coefficient was also computed between the grade levels and the pupil control orientations of the teachers. The Pearson r ($r = .11$) indicated a positive correlation between the two variables.

The slightly greater mean for the male teachers that was previously reported could have resulted from the fact that most of the male teachers were in the upper grades and the teachers in the upper grade levels were more custodial than the teachers in the lower grade levels. Willower, Eidell and Hoy (1973:7) had hypothesized that older students would pose a greater perceived threat for teachers. These researchers found that secondary teachers were more custodial than elementary teachers. In the present study, teachers in the upper levels of the elementary schools were significantly more custodial than the teachers in the primary grades.

Staffing Assignment

The following investigation was of an exploratory nature. Each of the teachers indicated which of the following responses best described their staffing assignment:

1. All traditional
2. Mainly traditional
3. Mainly team(s)
4. All team(s)

To determine if there was a difference in pupil control ideologies between teachers who were in a one teacher-one class situation and those who used a team approach (several teachers with several classes), a t-test for the difference between mean scores was used. The responses were dichotomized by grouping responses 1, 2 and 3, 4.

TABLE 5.9

STAFFING PATTERN AND PUPIL CONTROL IDEOLOGY

Staffing Pattern	N	Mean PCI Score	St. Dev.	F
Traditional	302	47.68	10.83	1.05
Team	17	40.06	11.12	

Pooled Variance Estimate:

df	t
317	-2.82*

*p = .005 (two tailed)

Table 5.9 reports the results of the t-test. The Null Hypothesis that there was no statistically significant difference between the means was rejected. Teachers who taught in teams were significantly more humanistic than teachers who worked in a more traditional manner.

Teaching Area

Each of the teachers were asked to indicate the best description of their teaching areas. The possible responses ranged from:

1. All traditional

2. Mainly traditional
3. Mainly open
4. All open

A dichotomous variable was constructed by grouping the responses 1, 2 and 3, 4. A t-test was used to determine if the difference in the mean PCI scores was significant.

TABLE 5.10

TEACHING AREA AND PUPIL CONTROL IDEOLOGY

Teaching Area	N	Mean PCI Score	St. Dev.	F
Traditional	281	47.64	10.95	.996
Open	38	44.52	10.86	

Pooled Variance Estimate:

df	t
317	1.63*

*p = .10 (two tailed)

The results of the analysis using a t-test are reported in Table 5.10. Because the computed t-ratio (1.63) was not significant ($p < .05$), the Null Hypothesis was accepted. There was no statistically significant difference in the mean PCI scores of the teachers who taught in traditional or in open area classrooms. It should be noted that the open area teachers were slightly more humanistic than the traditional teachers.

Students' Socioeconomic Status

Gossen (1969) found that the mean PCI score of elementary teachers in low socioeconomic status schools was significantly higher (more custodial) than the mean scores of elementary teachers in the middle and high socioeconomic status schools. Using a sample of high school teachers, Andrews (1973) found a significant positive correlation between high socioeconomic status and a humanistic pupil control ideology. In the present study, the teachers were asked to indicate their students' socioeconomic status by responding to the following item. The students you teach are best described as:

1. All children of professional and white collar workers.
2. Mostly children of professional and white collar workers.
3. Children from a general cross-section of workers.
4. Mostly children of factory and other blue collar workers.
5. All children of factor and other blue collar workers.
6. Children of rural families.

From the responses of the teachers, the socioeconomic status of the parents was inferred. It was previously reported in Chapter 3 that there was a great deal of agreement among the teachers and the principals as to the occupations of the parents of the students. Responses 1 and 2 were grouped together and labelled high socioeconomic status; responses 4 and 5 were grouped and labelled low socioeconomic status. A t-test for the difference between the mean PCI scores for teachers of the two groups was performed.

TABLE 5.11

STUDENT SOCIOECONOMIC STATUS AND

PUPIL CONTROL IDEOLOGY

Socioeconomic Status	N	Mean PCI Score	St. Dev.	F
High	48*	44.29	11.72	1.25
Low	66*	49.58	10.50	

Pooled Variance Estimate:

df	t
112	2.53**

*The N was drastically reduced because many of the respondents chose response 3.

**$p = .01$ (two tailed)

The results of the analysis with a t-test are reported in Table 5.11. Because the computed t-ratio (2.53) was significant ($p < .05$), the Null Hypothesis was rejected. Teachers in the low socioeconomic status schools were significantly more custodial than their colleagues in high socioeconomic schools. These findings confirmed the previous research studies reported by Gossen (1969) and Andrews (1973).

SUMMARY

Further confirmation for Hypotheses Four and Six was presented in this chapter. Hypothesis Four predicted that teachers in schools whose principals had a Theory X orientation would tend toward a custodial PCI and that teachers in schools whose principals had a Theory Y orientation would tend toward a humanistic PCI. In Hypothesis Six it was proposed that teachers in large elementary schools would be more custodial than teachers in small elementary schools. When the dependent variable (staff PCI) was subjected to a multiple correlation analysis, the size of the staff emerged with the highest multiple correlation coefficient and accounted for the largest amount of variance. The principals' Theory X-Y orientations contributed the second largest amount of variance. The other two independent variables (the pupil control ideologies of the principals and the pupil control ideologies of the teachers who had two or more years of experience with their principals) contributed a negligible one per cent (1%) to the change in the variance of the dependent variable.

The size of the staff and the principals' Theory X-Y orientations entered the regression analysis in the same order as the multiple correlations indicated. Both of these variables contributed a signficant ($p < .01$) amount to the regression equation. As the number of teachers on a staff increased, so did the custodialism of the staff. The pupil control orientations of teachers associated with principals who held Theory X orientations were significantly more custodial than the pupil control ideologies of teachers associated with Theory Y principals.

Previous research had shown a positive correlation between sex and pupil control ideology. For this study, this relationship was not evident. There was a positive correlation between grade level and PCI. Since the majority of the male teachers were in the upper grade levels (grades 4, 5, 6, 7) of the elementary schools, the proposition that grade level may have contributed to the increased custodialism of males was suggested. There was no significant difference in PCI between male and female teachers in the upper grade levels.

There was no significant relationship between age and pupil control ideology for these educators. Holzwarth (1974) had reported findings that showed teachers fifty years of age and over were more custodial than their younger colleagues.

Willower, Eidell and Hoy (1973:32-3) had tentatively suggested that as the amount of education of elementary teachers increased so did a humanistic pupil control ideology. Similar findings were not reported in the present study. Teachers with more than Bachelor's degrees were only very slightly more humanistic than teachers with Bachelor's degrees and less.

A number of studies (Willower, Eidell and Hoy, 1969; Helsel, 1971a) had reported findings that as teachers gained experience they became more custodial. This 'socialization effect' was not evident in this sample of teachers. In fact, the less experienced teachers (five or fewer years of experience) were slightly more custodial.

When the relationship between a teacher's desire to remain a teacher and his PCI was examined, no statistically significant relationship was found. There was also no significant difference in the PCI scores of those teachers who wished to become administrators

and those who did not have this desire. There was no relationship between these two aspirations of teachers and their pupil control orientations.

Those teachers who taught in a team teaching environment were significantly more humanistic than those who worked basically by themselves. Even though there was no statistically significant difference in the mean PCI scores, the teachers who taught in open area classrooms scored more toward the humanistic end of the continuum (44.52) than the teachers in enclosed classrooms (47.64). Further study of these two organizational variables would be necessary to provide conclusive results.

Gossen (1969) and Andrews (1973) reported significant findings between the socioeconomic status of students and teachers' pupil control orientations. The socioeconomic status of the students was inferred for the present study from one of the items on the teachers' questionnaire. The forty-eight (48) teachers, who indicated their students were from professional and white collar parents, were significantly more humanistic than the sixty-six (66) teachers who responded that their students were from factory and blue collar parents. The socioeconomic status of the students was a good predictor of the teachers' pupil control ideologies.

Those variables that did have relationships with the pupil control orientations of the teachers were:

1. Grade level of teacher
2. Staffing assignment
3. Socioeconomic status of students.

Chapter 6

SUMMARY, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

In the preceding two chapters, the results of hypotheses testing and post hoc investigations were reported. No attempt was made to draw relevant implications from the research findings. A fundamental reason for this type of research is to be able to make generalizations to a larger population. Thus this chapter has been divided into four major sections: summary of the study, summary of major findings, implications from the findings and suggestions for further research as a result of questions that were raised and remain unanswered.

SUMMARY OF THE STUDY

In this study public schools were considered to be service organizations. Carlson (1964) divided service organizations into four types according to the obligation on the part of the organization and the client. Public schools are unique organizations in that they are obligated to offer their services to clients who are often less than willing participants. It is probably not surprising that educational researchers have found pupil control an important facet of public school life. Willower, Eidell and Hoy (1973) adapted a control ideology continuum ranging from "custodial" to "humanistic" to describe the ideology of teachers towards the control of students.

The conceptual model diagrammed in Chapter 2 outlined the three main areas of interest in this study. Characteristics of the principals, teachers and the organizations (schools) and their relationship with the staffs' pupil control orientation were the main foci.

The Problem

After reviewing the pertinent literature in the areas of pupil control and managerial philosophy, a problem and two sub-problems were formulated to guide the research in this study. The stated problem was: Is the student control orientation of a school staff systematically associated with the principal's managerial philosophy?

The sub-problems under investigation were:

1. Is there a systematic association between an elementary school principal's pupil control ideology and the pupil control ideology of the principal's instructional staff?
2. Is there a systematic association between an elementary school principal's Theory X-Y orientation and the pupil control ideology of the principal's staff?

To determine if a relationship existed between the independent variables and the dependent variable, use was made of the PCI Form and the Theory X-Y Scale. The PCI Form developed by Willower, Eidell and Hoy (1973) provided PCI scores for the teachers and the principals. To describe the Theory X-Y orientation of the principals, the Theory X-Y Scale developed by J.H.A. Wallin was used.

Procedure

Responses to the PCI Form were obtained from 420 teachers and 41 principals in a suburban area of a western Canadian province. The 41 principals also provided responses to the Theory X-Y Scale. A 60/60 rule was employed to differentiate between usable and non-usable returns. In order that a school be included in the study, 60% of the teachers of a school had to respond to at least 60% of the items in the PCI Form. In addition, the principal had to respond to 60% of the items in the PCI Form and in the Theory X-Y Scale. In this manner, 10 of the original 41 schools were eliminated. The 319 teachers included in the study completed in excess of 95% of the required items; the 29 principals in the study responded to more than 99% of the required items.

The responses were transferred to IBM cards for use by the computer. The six hypotheses were tested by using Pearson correlation coefficients and t-tests.

SUMMARY OF MAJOR FINDINGS

To summarize the major findings in this study, results of the examination of the two sub-problems, six hypotheses and post hoc comparisons are presented.

Sub-Problem One

The first sub-problem asked whether a systematic relationship existed between principals' and staffs' pupil control orientations; statistical analysis of the data indicated no systematic relationship. The staffs of custodial principals were not significantly more custodial

than the staffs of humanistic principals. Conversely, the staffs of humanistic principals were not significantly more humanistic than the staffs of custodial principals. The pupil control orientations of the principals did not appear to be good predictors of the pupil control orientations of their staffs. There was no reason to believe that the staffs' pupil control orientations were associated with their principals' pupil control ideologies.

Sub-Problem Two

The second sub-problem asked whether a systematic relationship existed between the principals' Theory X-Y orientations and their staffs' pupil control orientations; analysis of the data did indicate a systematic relationship. The staffs of principals who held Theory X orientations toward the management of people were significantly more custodial than the staffs of principals who held Theory Y orientations. The principals' Theory X-Y orientations were good predictors of their staffs' pupil control orientations. How a principal felt his staff had to be treated in order to get them to do their assigned tasks was associated with the staff's belief system about the control of students. If the principal presumed that his staff had to be prodded and coerced to get them to work, the staff was more prone to believe that students were not to be trusted and that they needed external controls. Conversely, if the principal believed that his staff could display self-direction and self-control, the staff indicated that a more humanistic treatment of students would result in the students' ability to be more self-determining.

Hypothesis One

Hypothesis One predicted that elementary principals were more humanistic than elementary teachers. Analysis of the data resulted in confirmation of this hypothesis. Principals indicated more agreement with humanistic approaches to pupil control than did the teachers. Willower, Eidell and Hoy (1973:19) found that those who were more directly responsible for students were more custodial; support for this finding was established in the present study.

Hypothesis Two

The results of the testing of Hypothesis Two were reported in Sub-problem One.

Hypothesis Three

A positive relationship between principals' pupil control and Theory X-Y orientations was predicted in Hypothesis Three. Support for this hypothesis was found. Principals who assumed that people were basically lazy, agreed with a custodial pupil control ideology; principals who assumed that people were inherently active agreed with a humanistic pupil control ideology. Both, Theory X-Y and PCI measured the principals' belief systems about the amount of control that people required. Principals who held Theory X orientations and custodial pupil control ideologies, believed teachers and students required external controls to get them to do their work. The principals who made Theory Y assumptions about the motivation of people and held humanistic pupil control ideologies, assumed that teachers and students could exercise self-control if given the opportunity.

Hypothesis Four

Results of the testing of Hypothesis Four were reported in Sub-problem Two.

Hypothesis Five

Hoy (1968) (1969) reported that teachers became significantly more custodial as a result of their first year of teaching. In the present study, the assumption was made that it took at least one year for teachers to be influenced by their principals' pupil control ideology. Thus, the first-year-in-the-school teachers were eliminated to test Hypothesis Five. There was no association between teachers who had taught with their principals for two or more years and their principals on pupil control ideology. Even when the new teachers were eliminated, the correlation between principals' and teachers' pupil control ideologies was not significant.

Hypothesis Six

Studies on the relationship between school size and PCI reported varying results. Kozakewich (1973) and MacMillan (1973) reported that there was no statistically significant relationship between the two variables. Williams (1972) found a positive correlation between school size and PCI. Testing of Hypothesis Six resulted in a significant correlation ($p < .05$) and a significant difference ($p < .05$) in the mean PCI scores for staffs in large and small schools. While staffs of large schools tended to be custodial, staffs of small schools tended to be humanistic. School size was a good predictor of staff pupil control ideology.

Personal Characteristics of Teachers

When the relationship between the sex of the teachers and their pupil control ideologies was examined, no significant difference in the mean PCI scores for males and females was found. This finding was in disagreement with Helsel (1971a) but was in agreement with results reported by MacMillan (1973).

Holzwarth (1974) reported that the age of teachers had an influence on their pupil control ideologies. No support was detected for Holzwarth's finding that age and PCI were positively correlated. There were no significant differences in the PCI scores when the ages of teachers varied.

Willower, Eidell and Hoy (1973) suggested that, for elementary teachers, as amount of education increased, custodialism in PCI decreased. In the present study, there was no relationship between the academic qualifications of the teachers and their pupil control ideologies.

A number of studies have reported significant correlations between teaching experience and pupil control ideology (Willower et al., 1969; Helsel, 1971a). When the PCI scores of the teachers with six or more years of experience were compared with the PCI scores of teachers with five or fewer years of experience, the computed 't' was significant at the $p = .58$ level. These results were not similar to those reported by previous studies. For the present study, teaching experience was not associated with pupil control ideology.

The effect of teachers' aspirations on pupil control orientations was examined. There was no significant difference on

PCI between teachers who wished to remain teachers and those who did not desire to do so. Similarly, teachers' aspirations to become administrators were not related to their pupil control ideologies.

Organizational Variables

Willower, Eidell and Hoy (1973) had hypothesized that older students would pose a greater perceived threat to teachers, and found that the teachers of older students were more custodial. In the present study, the teachers of grades four to seven were significantly more custodial than the teachers of kindergarten to grade three. It seemed paradoxical that as students moved into the upper grade levels and became more capable of assuming responsibility for their own conduct, their teachers indicated that students required more external control. A further explanation for the increased custodialism may have been the nature of the tasks that students undertook. In the primary grades, most of the emphasis was on the socialization of the student. In the upper elementary grades, more cognitive exercises were expected of the student. Possibly teachers felt greater control was necessary for these instrumental tasks. As well, peer influence becomes more important for the grade 4 to 7 pupil. Teachers don't play as large a role in the control of students as the students get older.

The teachers were requested to describe their staffing assignment. Those who worked in teams (with other teachers) were significantly more humanistic than the teachers who taught in a one class-one teacher situation. This finding suggested that teachers who worked alone believed more external controls on students were necessary.

When the relationship between teaching area (enclosed classroom, open area) and PCI was examined, no significant difference on mean PCI was found between the teachers teaching in the enclosed classrooms and those teaching in the open areas. The type of teaching space was not significantly associated with the pupil control ideologies of the teachers.

Two studies (Gossen, 1969; Andrews, 1973) had reported significant negative correlations between students' socioeconomic status and teachers' pupil control ideologies; the higher the socioeconomic status of the students, the more humanistic were their teachers' pupil control ideologies. Similar results were found in the present study. The teachers of the low socioeconomic students were significantly more custodial than the teachers of the high socioeconomic students. It would be helpful if future research examined whether the strength of the relationship between principals' Theory X-Y orientations and staff PCI varied with the socioeconomic status of students.

IMPLICATIONS

This section contains some implications which have been drawn from the findings of this study. Because the educators were not randomly selected, the generalizability of the implications could not be stated. The implications could only be assumed to apply to the school system from which the data were collected. Therefore, the implications included here were not intended for the whole population of elementary schools.

The interpretations and implications are organized under the headings of Theoretical Implications and Practical Implications.

Theoretical Implications

The conceptual framework for this study viewed the school as a social organization. Such a perspective focused attention on the structure of relations in the schools as well as on attitudinal orientations held by the educators. Within the schools, the principals were considered to be leaders. The theoretical framework, that led to the main hypotheses, was that the pupil control orientations of the staffs were influenced by their principals' orientations toward the management of staffs and the control of students. The attitudes of principals toward the control of staffs was positively related to the pupil control orientations of the staffs. Previous studies had reported positive relationships between custodialism and status obeisance, traditionalism in values and closed mindedness. Another value orientation could now be included in the factors that determine educators' pupil control ideologies. Educators, in schools where principals had Theory X orientations, were custodial; educators, in schools where principals had Theory Y orientations, were humanistic. The pupil control orientations of principals were not related to the pupil control orientations of their staffs. The Theory X-Y orientations of principals were good predictors of pupil control orientations of staffs; the pupil control orientations of principals were not good predictors of their staffs' attitudes toward pupil control. This phenomenon may be explained by the fact that the principals' Theory X-Y orientations were directly concerned with the control of their

staffs. The principals' attitudes toward the control of students were more distant from the staffs. It was probably too simplistic to assume that all orientations held by principals would be associated with staffs' pupil control orientations. But, at least one characteristic of the principals influenced the pupil control ideologies of the staffs.

McGregor's Theory X-Y orientations were originally formulated to describe assumptions made by managers in business and industry. It was apparent that principals of elementary schools also varied in their agreement with Theory X and Theory Y assumptions.

The instruments used in the study (PCI Form and Theory X-Y Scale) were examined by means of a factor analysis. In the PCI Form, four items did not discriminate well. Items 5 and 13 did not load uniquely on any factor. The other items, items 8 and 19, loaded on two factors. These items should either be further refined or should be excluded from the PCI Form. No previous reports of a factor analysis of the Theory X-Y Scale were available. Two major factors were extracted from the twelve items. Five of the six Theory Y items loaded uniquely on Factor One. The sole Theory Y item (item 6) that did not load uniquely on Factor One should be revised before future administration of the Theory X-Y Scale. Three of the Theory X items loaded uniquely on Factor Two. Items 1, 5 and 8 loaded heavily on Factor One which was the Theory Y factor. Therefore, these three items should be excluded before future use of the instrument is made. An attempt should also be made to increase the number of items in the Theory X-Y Scale.

It should also be noted that there are theoretical grounds to hypothesize that the two instruments may be topping a common underlying dimension. This general dimension may be concerned with basic notions of control. There is need for further research to determine the extent to which the PCI and Theory X-Y instruments measure common constructs.

A trend toward humanism was detected when a comparison was made between the results reported by Willower, Eidell and Hoy (1973:20) and the results reported in the present study. The mean PCI scores of the elementary principals and teachers in the former study wer 50.9 and 55.3 respectively. In the present study, the mean PCI scores of the elementary principals and teachers were 42.98 and 46.89 respectively. The data for the study by Willower, Eidell and Hoy were collected in 1965. In the nine years to 1974, when the present data were collected, the pupil control ideologies of elementary educators appeared to become more humanistic. However, it must be noted that Willower, Eidell and Hoy collected their data from schools in Eastern United States. These schools may have been quite different from the schools in the present study.

Practical Implications

Hoy and Appleberry (1970:13) have indicated the extent to which a humanistic pupil control ideology is important:

> Moreover, to the extent that an elementary school attempts to communicate values as well as to communicate knowledge and develop skills, a humanistic pupil control ideology seems highly functional. A positive and strong commitment

> of students to the school seems required to effectively communicate values. It also appears unlikely that such commitment can be effectively attained in the custodial school; in fact, the custodial atmosphere in the school is more likely to produce alienation of students rather than commitment.

If the policy makers of elementary schools desire schools with teachers who are humanistic, what are some of the factors they should consider? A major finding of the present study was that principals who had Theory Y orientations to human nature had staffs who had humanistic pupil control orientations. This finding would indicate that principals who make Theory Y assumptions about their staffs should be recruited and retained for the humanistic schools. Another factor that increased humanism in pupil control was the size of school. Small schools (staffs) had more humanistic teachers. Thus the maximum size of the elementary school might be set at fifteen teachers or approximately 300 pupils.

The positive correlation between grade level taught and custodialism has implications for the future of education. Even though the students were getting older and should have been more capable of accepting responsibility, teachers felt the students needed more punishment-centred controls. This would appear to be in opposition to the accepted practice of having older elementary school pupils do more individual study. Individual study involves the making of decisions regarding the nature and scope of the project. On the one hand teachers are asking older students to be self-motivating but on the other hand they are denying that students are capable of self-control.

Another trend that appears to be popular in the current educational literature is shared decision-making by principals and teachers. Principals, who make Theory X assumptions that people are basically lazy and irresponsible, would likely discover that this method of making decisions would be in opposition to their basic philosophy about human nature. Thus, if decision-making on a more collegial basis was the aim of the policy-makers, they must be prepared to examine the Theory X-Y assumptions of the principals.

Another finding that school administrators should note was the disparity in the pupil control orientations of teachers who taught in team situations and those in traditional one teacher-one class situations. Since the two groups of teachers were significantly different in their pupil control orientations, it might not be advisable for teachers from the two staffing assignments to attempt to collaborate in their teaching.

SUGGESTIONS FOR FURTHER RESEARCH

The present study attempted to determine the relationship between principals' managerial philosophies and their staffs' pupil control ideologies. A more global view of the scope of the study would be the influence of principals on their staffs. Suggestions for further research were prompted by the findings of this study.

1. The application of Theory X-Y assumptions to principals requires further examination. The theory, as developed by McGregor, was intended for business and industry. Can the theory be readily transferred to the managers of schools?

2. Even though many elementary principals are recruited from the ranks of elementary teachers, elementary principals are more humanistic than elementary teachers. What factors influence principals to become more humanistic?

3. Teachers in low socioeconomic schools appear to be more custodial than their colleagues in middle and high socioeconomic schools. What environmental variables are at work here?

4. Studies into the relationship between pupil control orientations of educators and their pupil control behaviours in the classroom are necessary. Do pupil control ideologies indicate the methods of pupil control?

5. Needed improvements in the PCI Form and the Theory X-Y Scale have been indicated earlier.

6. Which other characteristics of principals influence the pupil control ideologies of staffs?

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APPENDIX A

TEACHERS PERSONAL DATA QUESTIONNAIRE

TEACHERS PERSONAL DATA QUESTIONNAIRE

(Only those items that were used in this thesis have been included in this Appendix. The original numbers that were assigned are used here.)

_____ School code. (To be assigned by researcher.)

_____ Teacher code. (To be assigned by researcher.)

(Please place responses on the line in the left margin.)

_____ 1. What is your sex?

1. Male
2. Female

_____ 2. How old were you on your last birthday?

1. Under 26
2. 26 to 35
3. 36 to 45
4. 46 to 55
5. 56 to 65
6. 66 or more

_____ 3. Indicate the grade level you are assigned to teach. If kindergarten, use 0; if remedial, library, etc. use 8.

_____ 4. What is your academic background?

1. Less than a Bachelor's degree
2. Bachelor's degree
3. More than a Bachelor's degree
4. Master's degree
5. More than a Master's degree
6. Doctor's degree

_____ 8. What annual salary group are you in?

1. Less than $6,000
2. $6,000 - 7,999
3. $8,000 - 9,999
4. $10,000 - 11,999
5. $12,000 - 13,999
6. $14,000 - 15,999
7. $16,000 - 17,999
8. $18,000 - 19,999
9. $20,000 or more

For each of the next three questions select one of these responses: (Include the present year)

1. 1 year
2. 2 years
3. 3 - 5 years
4. 6 - 9 years
5. 10 - 14 years
6. 15 - 21 years
7. 22 - 34 years
8. 35 - 43 years
9. 44 or more years

_____ 9. How many years have you been a teacher?

_____ 12. How many years have you been a teacher in this school?

_____ 13. How many years have you been a teacher in this school with this principal?

_____ 14. Your preference to remain a full-time teacher in public education is:

very weak 1 2 3 4 5 6 very strong

_____ 15. Your preference to become an administrator in education is:

very weak 1 2 3 4 5 6 very strong.

_____ 22. The students you teach are best described as:

1. All children of professional and white collar workers.
2. Mostly children of professional and white collar workers.
3. Children from a general cross-section of workers.
4. Mostly children of factory and other blue collar workers.
5. All children of factory and other blue collar workers.
6. Children of rural families.

_____ 30. Overall, the academic ability level of students in this school is:

very low 1 2 3 4 5 6 very high

_____ 42. The best description of your staffing assignment is:

1. All traditional
2. Mainly traditional
3. Mainly team(s)
4. All team(s)

_____ 43. The best description of your teaching space is:

1. All traditional
2. Mainly traditional
3. Mainly open
4. All open

APPENDIX B

PRINCIPALS PERSONAL DATA QUESTIONNAIRE

PRINCIPALS PERSONAL DATA QUESTIONNAIRE

(Only those items that were used in this thesis have been included in this Appendix. The original numbers that were assigned are used here.)

____ School code. (To be assigned by researcher.)

(Please place responses on line in left margin.)

____ 1. What is your sex?

1. Male
2. Female

____ 2. How old were you on your last birthday?

1. Under 26
2. 26 to 35
3. 36 to 45
4. 46 to 55
5. 56 to 65
6. 66 or more

____ 3. What is your academic background?

1. Less than a Bachelor's degree
2. Bachelor's degree
3. More than a Bachelor's degree
4. Master's degree
5. More than a Master's degree
6. Doctor's degree

____ 9. What annual salary group are you in?

1. Less than $16,000
2. $16,000 - 17,999
3. $18,000 - 19,999
4. $20,000 - 21,999
5. $22,000 - 23,999
6. $24,000 or more

For each of the next two questions select one of these responses: (Include the present year.)

1. 1 year
2. 2 years
3. 3 - 5 years
4. 6 - 9 years
5. 10 - 14 years
6. 15 - 21 years
7. 22 - 34 years
8. 35 - 43 years
9. 44 or more years

____ 12. How many years have you been a principal?

____ 15. How many years have you been principal of this school?

____ 17. How many full-time teachers regularly work in this school?

____ 18. How many pupils are enrolled in this school?

____ 25. The best description of the students in this school is:

1. All children of professional and white collar workers.
2. Mostly children of professional and white collar workers.
3. Children from a general cross-section of workers.
4. Mostly children of factory and other blue collar workers.
5. All children of factory and other blue collar workers.
6. Children of rural families.

____ 33. Overall, the academic ability level of students in this school is:

very low 1 2 3 4 5 6 very high

____ 42. The best description of your staffing assignment is:

1. All traditional
2. Mainly traditional
3. Mainly team(s)
4. All team(s)

____ 43. The best description of your teaching space is:

1. All traditional
2. Mainly traditional
3. Mainly open
4. All open

APPENDIX C

PUPIL CONTROL IDEOLOGY FORM

PUPIL CONTROL IDEOLOGY FORM

(The same PCI Form was administered to both the principals and the teachers.)

Select one number from the (five-point) scale to indicate the degree to which you agree or disagree with the following statements:

strongly disagree 1 2 3 4 5 6 strongly agree

____ 1. It is desirable to require pupils to sit in assigned seats during assemblies.

____ 2. Pupils are usually not capable of solving their problems through logical reasoning.

____ 3. Directing sarcastic remarks toward a defiant pupil is a good disciplinary technique.

____ 4. Beginning teachers are not likely to maintain strict enough control over their pupils.

____ 5. Teachers should consider revision of their teaching methods if these are criticized by their pupils.

____ 6. The best principals give unquestioning support to teachers in disciplining pupils.

____ 7. Pupils should not be permitted to contradict the statements of a teacher in class.

____ 8. It is justifiable to have pupils learn many facts about a subject even if they have no immediate application.

____ 9. Too much pupil time is spent on guidance and activities and too little time on academic preparation.

____ 10. Being friendly with pupils often leads them to become too familiar.

____ 11. It is more important for pupils to learn to obey rules than that they make their own decisions.

____ 12. Student governments are a good "safety valve" but should not have much influence on school policy.

____ 13. Pupils can be trusted to work together without supervision.

____ 14. If a pupil uses obscene or profane language in school, it must be considered a moral offense.

____ 15. If pupils are allowed to use the lavatory without getting permission, this privilege will be abused.

____ 16. A few pupils are just young hoodlums and should be treated accordingly.

____ 17. It is often necessary to remind pupils that their status in school differs from that of teachers.

____ 18. A pupil who destroys school material or property should be severely punished.

____ 19. Pupils cannot perceive the difference between democracy and anarchy in the classroom.

____ 20. Pupils often misbehave in order to make the teacher look bad.

APPENDIX D

THEORY X-Y SCALE

THEORY X-Y SCALE

Please select one number from the (six-point) scale to indicate the degree to which you agree or disagree with the following statements:

strongly disagree 1 2 3 4 5 6 strongly agree

_____ 1. Most people need supervisors who will watch them closely enough to be able to praise good work and reprimand errors.

_____ 2. People who understand and care about what they are doing can devise and improve their own methods of doing work.

_____ 3. By and large the majority of people are naturally active, not lazy; they like to set goals and enjoy striving.

_____ 4. While some may seek other satisfactions, most people work mainly for money and status rewards.

_____ 5. The main force keeping the majority of people productive in their work is the fear of being demoted or fired.

_____ 6. People are not naturally dependent on leaders.

_____ 7. People need a sense that they are respected as capable of assuming responsibility and self-correction.

_____ 8. People generally need specific instruction on what to do and how to do it; larger policy issues are rarely of much interest.

_____ 9. People appreciate being treated with courtesy.

_____ 10. People naturally resist change; they prefer to stay with ways known to them.

_____ 11. Most people enjoy learning and increasing their understanding and capability; it is never too late to learn.

_____ 12. Most people need to be "inspired" (pep talk) or given some sort of "push" from time to time.

APPENDIX E

RESPONSE RATE BY SCHOOL

APPENDIX E

School Number	Full-time Teachers	Number of Responses	Number of "Usable" Responses	Return Rate in Per Cent	School Accepted yes (x) no (-)
01	8	6	6	75	x
02	19	7	2	11	-
03	16	15	15	94	x
04	23	14	12	52	-
05	17	13	12	71	x
06	22	12	11	50	-
07	10	8	8	80	x
08	10	8	7	70	x
09	11	11	10	91	x
10	7	5	5	71	x
11	8	7	6	75	x
12	17	13	12	71	x
13	16	14	13	81	x
14	20	15	14	70	x
15	15	14	12	80	x
16	19	12	12	63	x
17	20	10	9	45	-
18	19	13	10	53	-
19	4	4	3	75	x
20	6	5	5	83	x
21	19	5	5	26	-
22	17	8	6	35	-
23	21	13	13	62	x
24	26	10	8	31	-
25	19	14	14	74	x
26	20	17	17	85	x
27	15	13	13	87	x
28	8	8	8	100	x
29	5	4	4	80	x
30	11	5	4	36	-
31	6	4	4	67	x
32	18	14	11	61	x
33	20	16	13	65	x
34	6	5	4	67	x
35	22	14	14	64	x
36	4	3	0	0	-
37	20	18	17	85	x
38	14	12	10	71	x
39	10	10	10	100	x
40	16	12	12	75	x
41	16	15	15	94	x
Totals	600	426	386	64.3%	

Rate return: Number of full-time teachers divided by the number of "usable" returns.

APPENDIX F

FACTOR ANALYSIS OF TEACHERS' PCI FORM

APPENDIX F

FACTOR ANALYSIS OF TEACHERS' PCI FORM

(principal components factor with varimax rotation)

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
PCI 01	.31*	.05	.05	.06	.01
PCI 02	.45*	-.03	.01	.20	.10
PCI 03	.41*	-.01	-.11	.22	.22
PCI 04	.32*	-.05	.01	.17	.10
PCI 05	.01	.18	.22	-.02	.05
PCI 06	.34*	-.04	.23	.09	-.22
PCI 07	.46*	.19	.23	.09	-.10
PCI 08	.37	.51	-.29	-.17	.03
PCI 09	.48*	.29	-.22	.09	-.14
PCI 10	.55*	-.04	-.02	.23	-.12
PCI 11	.68*	.10	.09	.03	-.07
PCI 12	.50*	.06	.15	-.06	-.13
PCI 13	.21	-.05	.27	-.23	.08
PCI 14	.54*	.15	.18	-.18	.20
PCI 15	.50*	-.02	.24	.00	.17
PCI 16	.57*	-.18	-.24	.05	.20
PCI 17	.60*	-.01	-.17	-.24	-.08
PCI 18	.53*	-.26	-.05	-.15	.13
PCI 19	.56	-.34	-.09	-.19	-.17
PCI 20	.37*	-.26	-.08	.02	-.14

*- loadings that were greater than .30 and also unique

Factor	Eigenvalue	Per Cent of Variance
1	4.29	66.5
2	.75	11.6
3	.60	9.3
4	.43	6.7
5	.38	5.8

APPENDIX G

FACTOR ANALYSIS OF PRINCIPALS' THEORY X-Y SCALE

FACTOR ANALYSIS OF PRINCIPALS' THEORY X-Y SCALE

(principal components factor with varimax rotation)

Item	Factor 1	Factor 2	Orientation
Theory X-Y 01	.63*	.24	X
Theory X-Y 02	.69*	-.02	Y
Theory X-Y 03	.70*	.16	Y
Theory X-Y 04	-.03	.87*	X
Theory X-Y 05	.55*	.26	X
Theory X-Y 06	.41	.39	Y
Theory X-Y 07	.57*	-.09	Y
Theory X-Y 08	.50*	.08	X
Theory X-Y 09	.53*	.16	Y
Theory X-Y 10	.05	.70*	X
Theory X-Y 11	.31*	.15	Y
Theory X-Y 12	.37	.71*	X

*- loadings that were greater than .30 and also unique

Factor	Eigenvalue	Per Cent of Variance
1	2.94	57.9
2	2.13	42.1